

A guide to Artificial Intelligence at the workplace

Your rights on algorithms

REPORT



**European Economic
and Social Committee**

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Your rights on algorithms

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Legal Disclaimer

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"We are faced with profound transformations of work and its forms, which make it necessary to radically reflect on its protections, rules and rights, otherwise we will suffer a general regression, not of employment but of rules [...], of a democratic organisation, built on the recognition of fundamental individual rights, non-negotiable".

Bruno Trentin, The City of Work, 1997

Preface

We have experienced the digital revolution with the presence of computers, the internet and smartphones, today it is necessary to understand and train in the universe and the uses of Artificial Intelligence (AI) because this evolution technology is everywhere, invisible, fast, diverse and disruptive for the economic models of companies and trades.

The question is no longer to be for or against AI, the question is whether companies are capable of co-constructing with social partners strategies integrating AI as a factor of innovation for customers and a factor job enrichment for employees. In other words, how will organizations train and engage employees so that they understand the opportunities, risks, biases and trust framework? The sought-after objective is to take advantage of facial recognition, text recognition, automated processes with AI but also that humans regularly exercise their technological doubt, their critical mind to question, for example, a GPS that makes him go around in circles or intuit false information.

This work is both a barometer and a compass. It makes it possible to map international developments concerning uses but also ethics in the field of AI. It provides a very comprehensive overview of the subject by integrating the different societal, political, cultural, economic and social dimensions. It also draws up concrete proposals so that each employee, consumer, buyer or citizen can be protected in terms of their data and their individual and collective freedoms. Integrating numerous examples, testimonies and analyses, it will allow the reader to have an illustrative and actionable vision of the use and challenges of AI in the post-covid world. He explains why it is necessary for humans to retain decision-making power in the face of AI, both at the individual and organizational level. Thus, to initiate the debate, it seems necessary to us to initiate five subjects developed in the book.

What is AI?

AI is a set of technological building blocks that enable machines to perform tasks. If we take the angle of uses, it is possible to distinguish 5 areas: speech and language, visual recognition; robotics and process automation; and knowledge optimization through analysis, alerts and forecasting.

Why train employees in AI?

Whatever the profession, AI will have an impact. Also, a new social responsibility is imposed on the company: acculturate, train and involve employees in the development of their profession with AI. For example, it will be as much to raise awareness of the risks of AI linked to data bias or cyberattacks that can loot company data as to explain how an automated process with AI can manage incoming emails and distribute them to the right contacts in order to free up time for analysis and processing of complex files for the employee. AI training begins with vocabulary and then with increasing skills in the behaviors to have when you are a business expert to work on an AI project. Thus, to reflect, collectively, within an organization, with the social partners on the transformation of professions with AI, is to reflect on the tasks that can be performed by AI, those where it can assist humans. and those that we can only do thanks to it.

What is the role of the social partners?

This acculturation and training in AI must be thought of in a holistic way, aimed at customers, employees and social partners. Within the observatory of the future of work and management, the Learning Lab Human Change of the Cnam, we produced in collaboration with Malakoff Humanis and the participation of the national secretary of the CFDT executive, in 2021, a white paper on the place and role of French social partners on the topic of AI in industry. Four recommendations were proposed: train social partners in an AI culture and data visualization, share data collection processes with social partners, co-create and communicate with social partners the company's AI strategy, co-construct with the social partners a framework of trust.

What are the opportunities and risks of AI?

Many industries are innovating with AI (medicine, industry, services, HR, etc.). The opportunities are linked to new uses that bring progress but the drifts and dangers are also numerous: the impossible explainability of certain algorithms, AI at the service of control, denunciation, false information, attacks, manipulation, etc. Also, a framework of trust at the level of the company, states and the free world is essential in order to regulate abuses and optimize progress.

Why is an AI ethics necessary?

Having values to make decisions constitutes the basis for establishing ethical axes. In addition to international initiatives and at the state level. We can cite Unesco, which created the 1st major normative instrument on the ethics of AI around four axes: proportionality, human monitoring and determination, environmental management and gender equality. Also, each company must ask itself the question on the need and the content of a top down action such as a charter, a label, a certification or bottom up such as the explanation of its best practices on the subject of decision-making, training, deployment and control of AI in its organization.

Thus, the topic of AI is a strategic subject for the social partners who support the development, innovation and disruption of businesses. This subject must be asked by putting the human, the employee, his search for meaning and his balance at the heart of the reflections. How will AI make work less strenuous, less stressful and more interesting and educational for people? this is the whole point of this book.

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Introduction

It's high time for a social debate on the use of artificial intelligence

COVID-19 has speeded up society's shift towards more digital with barely any democratic debate. It has provided an opportunity to roll out almost 100% digital purchasing methods in business, and new forms of artificial intelligence (AI), sometimes quantum in nature, in large industrial groups such as EDF, Total or Airbus. It has enabled banks, insurance companies and public services to discreetly connect their chatbots to emails, Frequently Asked Questions or automated reminders, instead of directing customers to customer service advisers, whose numbers have shrunk. It has quite innocently "encouraged" shops to put in place self-scanning tills rather than keeping on cashiers. It has provided an opportunity for all telecommunications networks saturated with text messages, emails or videos to make themselves secure, using algorithms, rather than engineers and technicians.

Within businesses, COVID-19 has caused an explosion in monitoring and teleworking systems, which is expected to continue. In short, it has enabled technology to make a radical shift to our social connections and our lives without any debate.

Why a guide to Artificial Intelligence?

A guide to Artificial Intelligence (AI) is definitely something a trade union is responsible for, because AI brings together technologies and because workers operate alongside AI on a daily basis. AI helps with recruitment, suggests a training pathway, automatically translates texts, sorts emails, selects case-law and assists decision-making... It answers our phone-calls. AI also calculates the level of pesticides in a field and assesses our borrowing possibilities. In the medical field, it can save our lives. At the heart of technologies such as robotics, facial or voice recognition, or the connection of objects, it assists, complements and even improves on a number of human cognitive abilities, in both technical and economic terms. It is involved in production processes in the automotive sector, in assisting human operators manage high-risk plants, and acts as an intermediary in deliveries or personal services.

AI also creates expectations for employees' rights in human resource management and for citizens' rights in justice, financial services, transport, agriculture, healthcare and public services.

These new rights are enforceable against these systems: the right not to be subject to a decision taken exclusively by an algorithm (for example, a decision not to recruit someone or the decision to refuse someone bank credit), the right to be forgotten, the right to an explanation of decisions taken by the machine, etc. At the basis of artificial intelligence is the algorithm. This feeds on huge amounts of data. The quality of these data determines its results. If the data are biased, the algorithm reproduces discrimination and amplifies them.

Systems are highly complex: one of Google's latest AI models contains 175 billion parameters, which means that a human is unable to explain how it works, make it transparent or track it!

To cope with this complexity and the opacity of artificial intelligence systems, to prevent them from making mistakes, to create trust for citizens, Europe, is the world's first continent, to propose regulation on AI.

The aim of this guide is to develop and broaden knowledge about Artificial Intelligence, its impact on the world of work and more broadly on society, in order to contribute to an informed and balanced debate that avoids the pitfalls either of predicting disaster scenarios or of excessively minimising the risks.

Part I: Global Context and challenges on artificial intelligence

If artificial intelligence is a source of hope for new productivity gains in companies and the reduction of tedious tasks or, opportunities in the agricultural, transport or medicine, it also brings with it risks of work intensification and control of people. It needs to be seriously supervised to protect human rights.

1. A skyrocketing global market for Artificial Intelligence

Economists agree that the Artificial Intelligence market will explode globally in the coming years. In five years, the global Artificial Intelligence market has multiplied ten-fold¹. Shortly before the pandemic, a Mercer's 'Win with empathy' survey conducted in March 2020 among more than 7 300 human resources managers from around the world revealed that the proportion of HR claiming to use predictive analysis to identify employees who were going to leave had risen from 10% in 2016 to 39% in 2020.

This explosion in the Artificial Intelligence market is linked to expectations of productivity gains. According to the findings of the Accenture report², labour productivity could increase by almost 40% with Artificial Intelligence in some developed countries by 2035. In France, analysts expect productivity gains increase of 20% over the next 15 years.

2. Tough international competition

The main drivers of artificial intelligence developments come from tech giants such as Google, Alphabet, Microsoft, Amazon, Intel, Facebook and Apple, or Baidu and Tenco on the other side of the world. The "biggest takes all" principle means that these companies benefit from strong positioning and considerable technological assets and funds to develop their own technologies or to acquire or build partnerships with start-ups. However, Artificial Intelligence is not only restricted to major US and Chinese technology companies. Today, due to factors such as open source, cloud, collaboration and fund availability, more and more start-ups are appearing in France and elsewhere on the basis of Artificial Intelligence technologies.

This is happening at a time when France and, looking further afield, Europe are trying to catch up with their Asian and US competitors, who have harvested astronomical amounts of data for more than a decade via the giants that are Amazon, Google Facebook and Huawei and others and who have invested massively. Of course, European investment in Artificial Intelligence is much lower than that of other global powers. According to a study by the European Investment Bank (EIB), the US and China together account for more than 80% of the EUR 25 billion in annual equity investments in AI and blockchain technologies, while the 27 European countries generate only 7% of this global amount. The EIB estimates that the total investment gap in AI and blockchain technologies in the EU is around EUR 5-10 billion per year.

However, through the Digital Europe and Horizon Europe programmes, the Commission plans to invest EUR one billion per year in AI and to attract additional investment from the private sector and Member States, to reach EUR 20 billion in investment per year over the coming decade.

1 2021 trading platforms data

2 Accenture et Frontier Economics, « Industry Spotlights. How AI Boosts Industry Profits And Innovation », 2017, www.accenture.com/_acnmedia/Accenture/next-gen-5/insight-ai-industry-growth/pdf/Accenture-AI-Industry-Growth-Industry-Report.pdf#zoom=50

3. Data challenges

Algorithms need huge amounts of data to perform predictive analysis (in maintenance), to produce rankings or to support decision-making. Artificial intelligence will exploit an increasing amount of data in the future. This need for data conflicts with the principle of the protection of personal data and the use made of it. For example, in China, on the pretext of preserving citizens' security and making cities safe, monitoring citizens in their most trivial activities has led to a social rating system, in which individuals are given a rating and can lose their basic rights, such as access to public services.

In industry, one million emails were illegally captured by the United States from Alstom's **messaging services** to enable General Electric, through a sort of State blackmail operation, in collaboration with the US Department of Justice, to snatch a key energy and defence asset relating to turbines from France. *The American Trap* (published by JC Lattès) tells the behind-the-scenes stories of this State Affair.

In this sector, European countries, most notably France, are nevertheless trying to remain in charge. The major French and European industrial players have accumulated data in a wide variety of fields such as the automotive, energy, nuclear and aerospace sectors. Cars alone gather an increasing amount of information about their drivers. McKinsey values this information at USD 750 million (*Monetizing car data*, 29 September 2016). In the defence industry, Thales and Atos have just set up a joint company, Athea, which will develop a dedicated platform for intelligence and internal security.

Data storage and European autonomy

Up to now, most data, particularly those of citizens, have passed through Google, Amazon, Facebook, Apple, and Microsoft (GAFAM), controlled by the United States. All major US digital companies used to transfer their data to the US through user agreements covering the general terms and conditions of use of a service. They saw this as a sufficient legal basis for passing on these data across the Atlantic. Until people became aware of the wealth that their exploitation could represent and Europe opposed this practice. Not everything passes through the United States any more. For example, a Franco-German initiative — a kind of 'Cloud Airbus', — according to Peter Altmaier, the German counterpart of the French Minister for Economic Affairs, — is not intended to create a competitor able to compete with Amazon, Microsoft, Google or Alibaba, like the aircraft manufacturer that rivals Boeing. Instead, the initiative represents cooperation among existing European players, and a label promoting 'the principles of openness, interoperability, transparency and trust', just like the General Data Protection Regulation (GDPR) for privacy. To be precise, Gaia-X will be a non-profit body established in Belgium. Its 22 members are major French and German companies that are either storage and software solutions suppliers or customers of these services: Orange, Deutsche Telekom, Bosch, Siemens, Atos, OVHcloud, Scaleway, BMW, etc.

The standard will also require "transparency", particularly on a crucial point: submission to extraterritorial laws such as the Cloud Act, which allows US justice to search data anywhere in the world if they are hosted by a US company.

These conditions are intended to favour European service providers, but the US giants will probably be able to meet the conditions and be included in the Gaia-X catalogue of offers. Amazon is also involved in discussions on the label. As is Google. "We offer our expertise on the highest standards of data security and confidentiality, which work in any kind of cloud environment and put data control directly into the hands of the customers", says the group, which, like Amazon, claims to give its customers the choice where extraterritorial data requests are concerned.

The use of AI can have an impact on human rights

The use of artificial intelligence can have an impact on human rights, democracy and the rule of law. It entails grey areas highlighted by the European Court of Human Rights, which has stated that it could threaten respect for human dignity, freedom of the individual, equality, non-discrimination and solidarity and social and economic rights.

In many countries, there has been a debate on the protection of democratic values with regard to artificial intelligence. While the GAFAM debate was gaining pace in Europe, the OECD, which spans 50 countries, took the initiative of hosting the Secretariat of a new Global Partnership on Artificial Intelligence (GPAI) to encourage the responsible use of artificial intelligence, while respecting human rights. The OECD drew on European guidelines to issue recommendations that provided the first international and inter-governmental standard for artificial intelligence policies ratified by these 50 governments.

What if human rights, democracy and the rule of law do not protect us sufficiently?

Due to the invasive nature of certain applications or uses of artificial intelligence, there might be situations in the future where our current framework, based on human rights, democracy and the rule of law, would no longer afford us adequate protection. Perhaps we should pause for a moment to reflect and find the right answer to what could be considered “Question Zero” Do we want to authorise an artificial intelligence system or a particular use of artificial intelligence and, if so, under what conditions?

The answer to this question should force us to look at the system or use of artificial intelligence from all angles in all places (be it in the workplace, in government or in the public sphere), which could lead to several ‘solutions’:

- A particular AI system or use could be subject to a moratorium or restrictions (“Red Lines”) or simply be prohibited (temporarily or indefinitely).
- New human rights could be introduced as safeguards against the “new” harmful effects of artificial intelligence
- Existing human rights could be adapted to allow for the responsible development and use of artificial intelligence.
- A particular system or use of artificial intelligence could be subject to specific democratic scrutiny.
- Private owners of powerful AI systems would be required to align their AI development and governance structures with the interests of those affected by these systems (such as workers, consumers, customers, citizens and policymakers).

The location of data-hosting under fire from Europe

The location of hosting data processed by artificial intelligence is under fire from Brussels. On 16 July 2020, the EU/US Privacy Shield, which allowed for the transfer of personal data from EU residents to the United States in accordance with the GDPR, was invalidated by the Court of Justice of the European Union. The Court called for ‘a high level of guarantees’ for these famous general terms and conditions, which we often sign up to by clicking ‘accept’, without actually reading them. In its Schrems II judgment, the Court made data transfers to the United States illegal, creating perplexity in many European companies working with third countries, as data protection authorities may suspend or terminate such transfers on their own initiative or in response to a citizen’s complaint. *None of Your Business* (NOYB), a Vienna-based association, chose, in August 2020, to favour a ‘radical’ interpretation of Schrems II, taking the view that the mere fact of working with an American economic operator represented, in itself, a failure to comply with that provision. It lodged a complaint against 101 European companies, working with Google and Facebook to stop all business relationships between

European companies and US companies because they continue to use Google Analytics and Facebook Connect on their websites, thereby transferring personal data to Google and Facebook in the US.

In May 2021, Ireland's High Court of Justice authorised the Irish Data Protection Commission (DPC) to resume an investigation that could lead to a ban on data transfers from Facebook in Europe to the United States. This decision is all the more interesting given that Ireland benefits considerably from its corporate tax system, which leads many US companies to base their European headquarters in Ireland.

4. Behind the algorithm: the bias

In January 2021, the Council of Europe in Strasbourg, issued guidelines under Data Protection Convention 108 to the governments, legislators and businesses in its 47 member countries, proposing that they prohibit the use of facial recognition "for the sole purpose of determining a person's skin colour, religious or other beliefs, sex, racial or ethnic origin, age, health condition or social condition". It also called for a ban on technologies capable of identifying emotions or detecting personality traits, feelings, mental health or worker engagement. It called for strict rules to prevent artificial intelligence from having a significant impact on our privacy and the disclosure of facial recognition data. It considered that some facial recognition applications, linking recognition of affect, for instance, to hiring of staff, access to insurance, and education were of great concern, both at the individual and societal levels and should be prohibited.

[A growing concern to understand AI decisions](#)

At the same time, more and more global users wanted to understand how decisions based on artificial intelligence were made. They called for systems to be made, after the study of "algorithmic bias" was dominated mainly by voices and cases from the English-speaking world.

The suspension of Amazon's recruitment algorithm in 2015 publicised how data bias could occur in artificial intelligence. Trained on the basis of hundreds of thousands of CVs sent to Amazon over a period of ten years, Amazon's recruitment algorithm had given 1-5 stars to recruitment candidates, but was unable to select the best CVs or the profiles of qualified women. Its preference was instead for under-qualified male candidates and disadvantaged CVs containing the words 'women', including 'Women's chess club captain'. The quality of the algorithm-training data was therefore called into question, with considerable repercussions.

Combating bias: the Amazon case

Amazon terminated an internet recruitment project in 2018 because of its bias. Amazon's AI recruitment favoured men over women, as it had been trained using profiles of Amazon employees who had been successful and who happened to be men. The system had not randomly eliminated women; it had examined the characteristics of successful employees through their typical wording and phrases and eliminated CVs that did not have these characteristics. The problem with these systems lies in the fact that, although they are excellent at identifying models, for example typical phrases used by successful employees, they do not understand the meaning of these sentences, and are unable to understand the meaning of success, or even to grasp what an employee is. All they can do is provide a label for a specific model.

More recently, in the United States, three American seniors in call centres highlighted an AI bias in recruitment, which has led to discrimination against them because of their age. They have brought cases against Facebook, Cox Communications, Amazon and T Mobile, among others, on the advice of the employees' trade union Communications Workers of America (CWA).

The IBM algorithm: a narrow view of the world when it comes to representing the diversity of faces

IBM's 'Diversity in Faces' dataset was created in response to criticism showing that social facial recognition software often simply did not recognise the faces of people with darker skin. IBM publicly promised to improve its facial recognition datasets to make them more 'representative' and published the 'Diversity in Faces' (DiF) dataset accordingly. But even after all these attempts to broaden the ways in which people are classified, the Diversity in Faces set is still based on a binary classification for gender: people can only be labelled as male or female. Achieving parity between the different categories is not the same as achieving diversity or fairness, and the construction and analysis of the IBM data perpetuates a set of harmful classifications in a narrow view of the world.

DISCRIMINATORY SYSTEMS

Is AI a reflection of our society? A 2019 study entitled Gender, Race, and Power in AI, by the AI Now Institute of the University of New York identified a persistent problem of discrimination based on gender and race (among other attributes and forms of identity) in artificial intelligence systems. According to the study, image recognition technologies categorise black faces poorly and algorithms used in the criminal justice system discriminate against black defendants.

Chatbots easily adopt racist and misogynistic language when trained in online discourse and Uber's facial recognition system does not work for trans drivers. In most cases, these prejudices reflect and replicate existing structures of inequality in society.³

Algorithm coding and intellectual property law

Bias analysis requires free access to algorithms. US judicial authorities are reluctant to grant this, however, without previously assessing all private interests, including the protection of intellectual property.

The same applies to companies that refuse to disclose the code of the algorithm in question, as if it were an industrial secret to be protected. Trade unions believe it is essential to resist companies' attempts to block the requirement for transparency in algorithms in the name of intellectual property rights and commercial secrecy. Trade unions must insist that, when AI is introduced into workplaces and affects the life of workers (concerning a decision on recruitment or promotion or access to training), the system must be able to explain its decision and, if it cannot, it must be tested and audited to ensure it meets the requirements of respect for fundamental rights. If this is not possible, its use should be prohibited.

Italy: trade unions take Deliveroo to Court in Bologna for the algorithm it used to obstruct the right to strike.

In a ruling of 31 December 2020, the Labour Division of the Court of Bologna, in response to legal action by three trade unions affiliated to the Italian General Confederation of Labour (CGIL), found that the algorithm used until November 2020 by the Deliveroo meal delivery platform was not neutral. According to that ruling, the system for riders to book working hours, which gave priority to the best-rated delivery riders, was 'blind', since it did not take account of the reasons for absence, penalising in particular those who joined a strike. Deliveroo was ordered to pay trade unions EUR 50 000 (but not to change the algorithm).

3 Angwin, J., Larson, J., Mattu, S. and Kirchner, L. (2016, May 3). Machine Bias. ProPublica, <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>.

Vincent, J. (2016, Mar 24). Twitter taught Microsoft's AI chatbot to be a racist asshole in less than a day. The Verge. Retrieved from <https://www.theverge.com/2016/3/24/11297050/tay-microsoft-chatbot-racist>.

Melendez, S. (2018, Aug. 9). Uber driver troubles raise concerns about transgender face recognition. Fast Company, Retrieved from <https://www.fastcompany.com/90216258/uber-face-recognition-tool-has-locked-out-some-transgender-drivers>

Part II : AI regulation: Europe a driving force between China and the United States

The European Union aims to develop high-quality and ‘ethical’ artificial intelligence that respects its fundamental values and human rights.

As such, it plays a leading role on the world stage. It was the first in the world to establish a comprehensive legal framework for the development, rollout, and responsible and ethical use of artificial intelligence. Demanding “a set of ethics” for artificial intelligence means questioning AI systems on respect for European fundamental rights: respect for private life, for the right to dignity, the right to equality, the right not to be discriminated against, etc.

5. The European vision: human in command

Europe does not want to allow powerful tech companies such as GAFAM to do whatever they want, as happens in the US, and nor does it want to follow the example of China, which exploits artificial intelligence to create a state of social surveillance and ratings. Instead, Europe wants a “human-centred” approach that stimulates technology, while preventing it from undermining the privacy of its citizens. EESC was the first European institution in 2017 to issue its own initiative opinion to call for a human in command approach when dealing with IA systems.⁴ In 2018, a European Commission expert group, involving French Democratic Federation of Labour members of the European Economic and Social Committee (EESC), called for public bodies in European countries to comply with seven requirements for artificial intelligence to become “trustworthy”. The European Commission has called for strict controls from Brussels, on the grounds that artificial intelligence could become dangerous in certain areas. In February 2020, the Commission launched a consultation on a White Paper on *Artificial Intelligence: a European approach to excellence and trust*, in which it advocated an approach based on regulation and investment. It put forward the case for artificial intelligence, while highlighting the risks associated with it. In areas where certain uses of artificial intelligence are considered to be “high-risk”, the White Paper stated that systems must be “transparent, traceable and guarantee human control” in particular in the fields of health, transport, policing and justice. Among the uses of AI, it distinguished those with ‘legal effects’ (in recruitment procedures, for example), those with ‘risks of fatalities’ such as weapons, and those that can cause ‘damage and injury’. Its White Paper provides for a study of practices on a case-by-case basis.

6. Seven European requirements for trustworthy AI

EESC adopted an opinion on the ethical guidelines proposed by Commission for a trustworthy AI.⁵ The opinion stressed the importance of a human command approach when dealing with AI systems and the conformity of AI to fundamental rights.

AI controlled by humans

According to the European Commission, AI systems should be a vehicle for fair societies, serving fundamental rights, without restricting or distorting human autonomy. People must remain in charge of decisions.

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016IE5369>

⁵ <https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/building-trust-human-centric-artificial-intelligence-communication>

AI that is robust and secure

The European Commission states that trustworthy artificial intelligence requires algorithms that are sufficiently secure, reliable and robust to manage errors or inconsistencies throughout the life cycle of artificial intelligence systems. In Finland, a ransomware attack hit the database of the Finnish company Vastaamo, which operated 25 psychotherapy centres. This resulted in the leak of the medical data of more than 4 000 patients and became front-page news in Finland, after hackers published the first thousands of patients' medical data on the dark web.

AI that respects privacy and in which citizens control the data

According to the European Commission, citizens must have full control of their personal data and be sure that these will not be used against them in a harmful or discriminatory manner. The General Data Protection Regulation (GDPR) must be able to protect them from abuse of their data, but this text only applies to personal data, and not to "anonymous" aggregated data, which are usually used for model learning.

AI that is transparent

The traceability and explainability of AI systems must be ensured throughout systems' life cycles, from their design to their development and throughout their use. Transparency is measurable. Its different measurement scales may allow, for example, for the certification or labelling of systems. These can lead to the use of artificial intelligence systems in "high-risk" contexts.

AI that is non-discriminatory and fair

The European Commission states that artificial intelligence systems should take into account the full range of human capabilities, skills and needs. The AI research sector is characterised by a lack of diversity (e.g. a predominance of white men) and many researchers have shown that prejudices in artificial intelligence systems reflect historical patterns of discrimination. The use of artificial intelligence systems to classify, detect and predict ethnic origin and gender needs to be urgently reassessed. Systems that use physical appearance to interpret personality or frames of mind are deeply suspicious, including AI tools that claim they can predict 'crime' on the basis of facial characteristics or assess workers' skills through 'micro-expressions'.

AI that delivers societal and environmental well-being

Artificial intelligence systems should be used to support positive social developments and enhance sustainability and ecological responsibility. According to the European Parliament study of March 2020, entitled *The Ethics of artificial intelligence: issues and initiatives*, States and organisations should ensure that "AI is widely applied and proactively made accessible (especially in areas of great social value, such as poverty, illness, or clean energy (...)) 'The biggest question around AI is inequality, which isn't normally included in the debate about AI ethics.'"

AI that can be held accountable

The European Commission calls for mechanisms to be put in place to ensure accountability for artificial intelligence systems and their results. It recommends designating who is accountable and responsible for possible malfunctions.

7. Towards a regulation of “high-risk” AI

Following the consultation of citizens, trade unions, businesses and NGOs, on 21 April 2021, the European Commission presented a draft of *Artificial Intelligence Act*⁶ laying down harmonised rules on artificial intelligence. It considers that, due to its opacity, complexity, data dependence and autonomous behaviour, artificial intelligence may undermine a number of rights enshrined in the Charter of Fundamental Rights of the European Union.

The European Commission text has the advantage of providing a sound legal framework for artificial intelligence. Once adopted by the European Parliament and the Member States, it will apply directly to the Member States, without needing to be transposed. With the current legislative proposal, the European Commission has delivered a clear message: fundamental rights and European values must be at the heart of the European approach to artificial intelligence. ‘Anything goes’ is no longer the norm and the rules established at EU level will certainly have repercussions worldwide.

The text will provide a framework for artificial intelligence systems classified as “high-risk”, which can only be authorised in the European Union if they have been assessed for compliance with European standards.

In the world of work, the “high-risk” artificial intelligences that require supervision are listed in Annex III of the draft European regulation:

- 1/ artificial intelligences for the **recruitment** or selection of natural persons, in particular for the publication of vacancies, the pre-selection or filtering of applications, the evaluation of candidates during interviews or tests
- 2/ artificial intelligences making decisions on work-related **promotion** and **dismissal**, on the allocation of tasks and on the monitoring and evaluation of people's performance and behaviour in these relationships
- 3/ Artificial intelligences determining **access to vocational training or assessing students in educational and vocational training institutions**.

These artificial intelligence systems can have a significant impact on people's future career prospects and livelihoods. The Commission points out that when these systems are “poorly designed and used”, they can perpetuate patterns of discrimination, for example against women, certain age groups, people with disabilities, or people of certain racial or ethnic origins or sexual orientations.

In addition, those used to monitor the performance and behaviour of such individuals may have an impact on data protection and privacy rights.

To counterbalance the risks they pose to us, these systems will need to use **very high-quality data**. They will need to have detailed documentation of compliance with existing regulations, be transparent, fully accurate and secure. Classifying a particular form of artificial intelligence as “high risk” implies an obligation of transparency and human supervision of its “users”. Real people will have to monitor such artificial intelligence during its use, using human-machine interface tools to prevent or minimise any health, safety or fundamental rights risks that may arise. Providers of high-risk” artificial intelligence will be required to **self-certify** their compliance before putting their products on the market or into service.

⁶ European Commission (2021), Proposal for a Regulation laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), COM(2021) 206 final. <https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence-artificial-intelligence>

Employees will be informed when emotion detection or facial recognition is used

According to the draft regulation, any user of an emotion recognition or biometric categorisation system must inform the "natural persons" and employees concerned.

8. A draft with poor workplace references

Apart from these exceptions, the transparency guarantees only benefit the "users" and the employees are excluded. When it comes to labour relations, the current draft European regulation on artificial intelligence still raises many questions. No protection or transparency obligations of artificial intelligence systems are drafted for workers, with the exception of Article 52 of the draft regulation, which provides for a comprehensive right to transparency. But in the other documents published by the European Commission, the reference to workers and staff representatives is cruelly lacking. This draft text implicitly accepts a wide range of tools for monitoring employees without questioning either their validity or their compatibility with European values. EESC produced an opinion⁷ and give recommendation to improve the European project.

9. Regulation, when will it come?

While developments in the field of AI are very rapid, the new European standards for artificial intelligence will not enter into force immediately. They will be subject to an in-depth examination by MEPs from 2022 onwards - it is likely that the Act will not be published until 2025. The degree of self-regulation of the European system will be crucial in this respect. National authorities will carry out checks and inspections, while some providers of artificial intelligence, who hope to deploy their products in employee recruitment or migration control will be allowed to meet European standards through self-assessments.

The self-assessment requirement will appeal to the technology industry, but it has already raised concerns among MEPs, activists and academics, who believe that it is not sufficient to protect to protect citizens, as it puts the assessment of the compliance of artificial systems in the hands of the providers. The between the two parties will determine how easy or difficult it is to comply with the rules.

10. The European social partners framework

At the same time, an initial agreement on digital matters was signed in June 2020 between trade unions and European employers' representatives. It was called the *European social partners framework agreement on digitalisation*. This text explores digital opportunities for both employees and platform workers. Its stated aim is "the anticipation of change [and] the delivery of skills needed for workers and enterprises to succeed in the digital age." It does not put forward a plethora of new rights, as legislation and producers of standards differ from country to country. But it engages in a "partnership and dialogue process" to explore digital opportunities and risks, skills and job-security issues, how to connect and disconnect, and how to control artificial intelligence and data protection. This text is both a call and support for negotiations on the impact of digital development among the social partners in each Member State.

Its signatories are, on the one side, the European Confederation of Trade Unions (ETUC) and, on the other, BusinessEurope (the European equivalent of MEDEF), the European Centre of Employers and Enterprises providing Public Services (CEEP) and SMEunited (representing SMEs). The text states that

⁷ <https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/regulation-artificial-intelligence>

digitalisation "comes with challenges and risks for workers and enterprises, as some tasks will disappear and many others will change."

The European Economic and Social Committee, adopted in 2017 an own-initiative opinion which focused about AI and contributed to make the debate started giving the point of view of civil society. Some of its members participate in the European High level ethical committee, whose work was finalised by the commission publication of the ethical guidelines on AI in 2018. The EESC contributes to extend analysis and thoughts on AI, by elaborating new opinions from members of an "ad hoc group on AI" created inside the institution.

As other unions organised in ETUC, CFDT Cadres has responded to consultations on specific legislation in favour of regulating artificial intelligence. It was the rapporteur to the European Economic and Social and Social Committee of two opinions on AI, which were adopted by all the components and voices organised in this Committee. The EESC expressed its position on the draft of Artificial Intelligence Act in September 2021.

Part III: Civil society issues

11. Choosing the AI that benefits the environment

Measuring digitalisation's environmental footprint

Europe's aim is to reduce greenhouse gas emissions by at least 55% by 2030 and to reach zero greenhouse gas emissions (climate neutrality) by 2050. The development and widespread uptake of climate-friendly and environment-friendly AI solutions has great potential to help achieve these ambitious goals. In its conclusions, the European Environment Council stressed the importance of focusing on the potential direct and indirect negative impacts of AI on the environment, and called on the Commission to develop indicators and standards on the negative impact of digitalisation. While AI has great potential to help the EU achieve its climate and environmental goals, the technology itself has a significant environmental footprint, particularly in terms of energy consumption. Therefore, further assessment and actions are needed to ensure that the net environmental impact of AI is positive.

In March 2021, 24 Member States, together with Norway and Iceland, signed a declaration to speed up the use of green digital technologies for the benefit of the environment, encouraging the development and use of energy-efficient algorithms.

In France, on 12 January 2021, the Senate adopted a proposal for a law aimed at limiting the impact of digital technology on the planet: penalising software obsolescence, making the eco-friendly design of websites mandatory, limiting the renewal of digital end devices such as telephones and computers, etc. This is an unprecedented text, which responds to a real emergency. If nothing is done, by 2040, the digital sector will be more polluting than air transport.

12. A tax for GAFA to support digital transition

A GAFA tax hidden behind a global tax

In France, the idea of a tax on GAFA services had originally taken the form of a draft tax law on digital companies that engaged in targeted online advertising or the sale of personal data for advertising purposes or which were intermediation platforms.

Focusing mainly on US firms, the tax was first harshly criticised by the Trump administration, which in turn threatened to tax US imports of French wines in retaliation, before Washington announced, under Joe Biden, that it wanted a global corporate tax of at least 15%.

2021: taxing the multinationals

In June 2021, the G7 finance ministers announced an agreement on a minimum global tax involving the better distribution of tax revenues from multinationals, especially the digital giants. 130 countries, including China and India, agreed to apply a global minimum corporate tax rate of at least 15%. Digital companies would be partially taxed where they sell, and not as is the case today, where they choose to establish their headquarters, specifically in tax havens. Nine countries rejected the agreement, including Ireland, Estonia and Hungary. This tax has been strongly recommended by a number of opinions EESC delivered on digital transition.

13. The struggle between security and fundamental freedoms

Mass facial recognition

Whatever version of the draft Act on AI regulation is adopted by the European Parliament, it is likely that the text will give rise to a showdown with the Council of Europe. In particular, the exceptions it makes for law enforcement authorities are likely to please security-conscious countries (France, Sweden and Germany already use certain artificial intelligence systems such as facial recognition among their security measures). Even if these systems are deployed to combat terrorism, the European Court has already considered that these uses are not sufficiently covered by safeguards. On 25 May 2021, the European Court of Human Rights condemned the United Kingdom and Sweden for abusing data interception, thus highlighting the risks to our democratic societies.

Data-related rights (the right to rectification, the 'right to be forgotten', the right to restriction of data processing, the requirement to be notified with regard to the rectification or erasure of personal data, the right to data portability and the right to object to individual decisions taken by an algorithm in an automated manner.

A group of NGOs in Europe attack Clearview, a specialist in facial recognition.

The start-up Clearview AI, a publisher of facial recognition software, has been repeatedly criticised by NGOs. In May 2021, it was attacked by the NGOs Privacy International, Hermes Center of Transparency and Digital Human Rights, Homo Digitalis and NOYB, which lodged complaints with the French, Italian, Austrian, Greek and British data protection authorities. These NGOs consider that the company is in breach of the GDPR.

14. The stance of employers

The stance of companies in French industry

The perception of employers in the metal industry in France is ambivalent. On the one hand, they hope for a number of benefits: the traceability of environmental products to satisfy the increasingly demanding consumer, better knowledge of their final customers, huge productivity gains, the end of dangerous tasks, etc. On the other hand, they fear that workers will suffer as a result. In particular, they see a decline in qualifications, a loss of specific know-how, especially as expertise will be replaced by generic skills and all-purpose workers will do nothing more than operate connected machines. With regard to the transfer of knowledge, they know that experienced employees will be replaced by tutorials that will make rapid recruitment easy, in order then to train up low-skilled young agency workers.

These employers stress the importance of transforming trades and of providing support to workers. They believe that workers must be kept informed of the ultimate purpose of the projects and be supported through the changes in order to successfully mainstream digital tools. For the time being, only a few companies involve staff representatives upstream of projects involving man-machine relations in order to take account of the real work carried out on a daily basis (and not the work scheduled to be done) and to avoid the disappointments of a change that is not well understood or controlled.

They also see a danger in the loss of autonomy and skills and in the widespread and unlimited monitoring of the work that this technology makes possible. At the same time, they recognise that this technology makes it possible to free up humans from the most arduous tasks and to prevent accidents at work.

The contributions of professional associations to changes in jobs

The impact of AI is not homogeneous and varies in scale from one sector to another. Staff representatives can, within professional associations, negotiate agreements on the use of artificial intelligence, as AI can have an impact on areas of negotiation falling within their remit.

Part IV : Recommendations on AI at workplace

15. Social dialogue is needed

Introduction of technology, not without prior social dialogue.

Social dialogue will have to play an important role in complementing the Regulation, as the European social partners in the telecoms and insurance sectors have already stated in a joint declaration and in the independent European agreement on digitalisation of 2020.

Dialogue between the social partners will make the use of artificial intelligence and its added value acceptable and will help to create trust. We believe that discussions between the social partners can lead to better quality of work, greater efficiency, creativity, innovation and competitiveness.

The IT tool must be placed at the service of an effective human project and not the other way round. It is always frustrating for the customer to be told by the person they are speaking to that they would like to help but are prevented from doing so by the computer, or that the computer has unlimited control over the employee, thereby concealing the demands of those who have helped set it up.

The use of AI could cause too-frequent changes in the organisation of work, cognitive overload, a loss of autonomy at work, a loss of sense of purpose at work or cyber-bullying. Therefore social partners should be regularly consulted when introducing artificial intelligence and workers' health issues addressed. There might have conflicting interests in the choice of technologies and their use, and workers have a say.

Challenge the management

We must remember that the introduction of artificial intelligence can often hide behind a digital tool already being used, to which it is 'added'. Its 'incognito' arrival in the company makes it impossible to know whether the artificial intelligence has an impact on human rights, working conditions, access to employment or professional development. Compliance, liability, and redress measures should therefore start with an obligation of transparency. Human and workers' rights, democracy and the rule of law are at stake!

As a worker representative and as a manager, the first question to be asked is :
Does my company/administration use artificial intelligence systems?

Eight questions for a prior assessment of Artificial Intelligence in your workplace

- 1- Does my company/administration use AI systems?
- 2- Who is behind the decision to implement an AI system and why are they doing it? If the system was purchased, who was the subcontractor that designed it and who purchased it within the company and on what criteria?
- 3- To whom is the system useful and to how many people?
- 4- To whom can it cause damage and for whom does it entail disadvantages?
- 5- Who is excluded from AI and how many social and societal rights are likely to be lost due to its use?
- 6- How was the decision to implement the system taken and whose opinion was sought and under what procedure?
- 7- Who is the owner of the data, who has access or user rights?
- 8- Are users and employees involved in the design of the AI?

Assessing the number of jobs affected and the needs for training

Economists disagree on the relative impact of artificial intelligence and robotics on the employment of workers. According to a study of 28 March 2018 by *France Stratégie*, a think-tank reporting to the Prime Minister, it is difficult to quantify the impact of robots, AI and sensors on the workforce, as we are at the start of a technological revolution. *France Stratégie* surveyed 1 896 experts on the impact of emerging technologies; 48% believed that robots and chatbots would displace a significant number of blue collar and white collar workers, with many fearing that this would lead to a sharp increase in income inequality, a large number of unemployable people and social breakdown. The other half of the experts who responded to the survey (52%), however, expect that technology will not displace more jobs than it creates by 2025. These experts believe that, while many jobs currently done by humans will be largely taken over by robots or bots, human ingenuity will create new jobs, new industries and new ways of earning a living. Furthermore, other studies indicate that the impact of artificial intelligence on employment will vary from one economic sector to another, depending on the degree of innovation in businesses and the qualification level of workers. As a result, trade unions and workers' representatives will need to negotiate the planning and support for the transformation of jobs and tasks, and the provision of training to equip workers with sound skills and must ensure that the less skilled, the most vulnerable, young people, women and people with disabilities are not left behind.

Furthermore, progress in the areas of autonomous **robotics** and collaborative robotics is leading to a shift from working on actual production to monitoring automated processes. It is estimated that 22% of jobs in the EU could be automated by 2030, amounting to 53 million jobs.⁸

Strengthening gender diversity in digital jobs

Diversity and gender diversity in digital careers are crucial to help shape the worldview and its issues and to reduce the risks of bias in algorithms in discrimination. However, the issue of the shortage of women in digital fields remains a major problem. As digital technology and, tomorrow, AI become more prevalent in our lives, the situation in these fields is alarming, as women are under-represented. By 2021 in Europe, only 18% of women will work in the IT sector. The European Commission proposes that 10 million women should be working in IT by 2030 ("Digital targets 2030"). Social dialogue should address this issue at European, national branch and company level.

Assess AI on the quality of working conditions

Some workers may see artificial intelligence as a threat to their working methods, or as a risk of questioning their place in the organisation or as a challenge to their more technophile colleagues. While other workers may feel more productive, more powerful with artificial intelligence. In short, artificial intelligence can be the source of psychological problems. The choice of unlimited control, for example, may threaten the right to fair working conditions, preserving health and safety, dignity in the workplace and the right of workers to organise. If workers are constantly monitored by their employers, how can they organise themselves collectively? The right to equal opportunities and to treatment free from gender discrimination in employment and career development can be undermined when systems convey prejudices through their data or by their designers. Automation can either improve working conditions (improving job safety and ergonomics, broadening out the scope of the job, making it more interesting, reducing arduous and dangerous tasks) or, if its sole purpose is productivity, lead to their deterioration, making the job harder and more intense, reducing workers' autonomy and increasing their isolation. The aims and impact of AI on the quality of work must be central to social dialogue.

⁸ [McKinsey Global Institute \(2020\)-The-future-of-work-in-Europe-discussion-paper.](#)

Training social dialogue partners on AI issues

Training trade union teams and HR directors on the ethical and social challenges of artificial intelligence is all the more necessary, as artificial intelligence is often brought into businesses or administrations without any discussion. This silence about its introduction puts staff representatives on the defensive. They feel helpless, fearing that they do not have the tools to discuss the matter, especially as they see threats to jobs. They do not feel suitably qualified, vis-a-vis their leadership (who need to be held more accountable for artificial intelligence) or vis-a-vis experts, which does not give them sufficient confidence to become fully involved. Moreover, the current legal framework allowing staff representatives to take action on this issue is not clear enough. These barriers therefore result in low involvement of staff representative bodies in artificial intelligence, at a time when the expectations of the employees they represent are changing significantly in terms of reassessing the direction of progress, protecting jobs and monitoring data. This highlights a need for training and awareness-raising among teams and employees about artificial intelligence.

Today, only 44% of employees say they are willing to work with artificial intelligence, while 20% consider themselves sufficiently supported in this area, according to the study *'Artificial intelligence and human capital: the challenges facing businesses'* conducted by Malakoff Médéric and the Boston Consulting Group (BCG) in March 2018.

Involving trade unions in data governance

For this reason, unions call for employee representatives be involved in data governance. Negotiations on the collection of employees' data are essential when AI is implemented in a workplace.

Workers' personal data should not be used by employers without coordination or cooperation between occupational health services. CFDT-Cadres calls for EU rules to require informed consent from each data owner when using their data. It would also like to see a legal framework for non-personal data, which would have a significant impact on the rights or situation of workers, as these data are not supervised by the GDPR and can lead to bias and discrimination that affect the organisation of work and working conditions. In this regard, Article 88 of the GDPR encourages the negotiation of collective agreements on the protection of the human dignity, legitimate interests and fundamental rights of data subjects, paying particular attention to the transparency of processing, to the transfer of personal data within a group of undertakings and to monitoring systems in the workplace. CFDT-Cadres opposes the misuse of artificial intelligence systems to undermine the rights to collective bargaining and freedom of association, and other fundamental rights.

Assessment and transparency on algorithms

Given the specific characteristics of this technology (i.e., opacity, complexity, data dependency, autonomous behaviour), the use of AI may infringe several fundamental rights enshrined in the European Charter. All decisions based on algorithms that impact on workers should be explainable, interpretable, concise, understandable, accessible, and compliant with the GDPR. As such, the algorithms used by AI systems must first be audited by independent bodies.

A welcomed initiative in France

Last November 2021⁹, French labour ministry announced the creation of a lab to study impact of AI on work. Social partners will be involved on the debate and should be strongly associated in all the process of inquiry and of data collection. Such initiatives are welcomed and should be shared at European level in all member states.

⁹ : <https://www.usine-digitale.fr/article/>

16. Work at Covid 19 era: make sure that human remains at command

Covid-19 has been a great accelerator of the massive use of digital technologies and of a generalization of telework. Intrusive and powerful means of control over work have been put in place without any collective consultation, and sometimes even without the knowledge of management. These uses should be the results of an informed managerial choice and to prior social dialogue with workers representatives.

Monitoring, bias, discrimination

Powerful techniques to control teleworkers were massively deployed during lockdown. In 2020, the Aberdeen intention score for the purchase of remote monitoring tools (ISG Research) in the United States has risen from 1 to over 53 in eight weeks in 2,000 large companies, after the first lockdown. Our union in France, for example, was alerted to the case of a French call centre with an international dimension, which had implemented software that allows real-time and permanent monitoring of the telemarketer's screen by the supervisor. This monitoring is prohibited by the Commission nationale informatique et libertés (CNIL) since November 2020.

As for the monitoring of the body, union was also informed of software used to enforce the social distance in Amazon's warehouses. This software was apprehended as a dehumanising practice and then removed. Among management choices behind AI, it may be tempting to use sometimes AI systems for monitoring and tracking workers, which allow tasks to be allocated without human intervention, assess, and predict people's potential and performance in hiring and firing situations.

Monitoring softwares such as Doctor, Sneek, Vericlock, Deskttime, ActivTrack, Hubstaff, Clevercontrol, Teramind... are flourishing and allow deep 3D control. The functionality of these programs has expanded: geolocation, keyboard recorder time spent online on 'productive' or 'non-productive' sites, time spent in the office, keystroke logging, number of emails sent, and the identity of recipients. Other software programs take screenshots of computers every five or ten minutes, or reveal "digital behaviour", to detect any anomalies. This behaviour, scaled up by artificial intelligence, can be used for much broader monitoring. For example, the control of login and logout times and productivity scores have intensified since the confinements of 2020 and 2021.

The use of these tools needs to be discussed with managers, whose responsibility, room for manoeuvre and decision-making power may be severely limited by this use. And of course, as the CNIL points out, the employee community and their representatives must be informed and consulted on this use.

[Move from a culture of monitoring to one based on results and trust](#)

The CNIL (French Data Protection Authority) should also take a stance on the unlawful practices for monitoring employees that have emerged out of teleworking due to COVID-19. The CNIL considers that, if they want to retain the trust of their employees, companies are taking a major risk by monitoring their employees through software that is often presented as a harmless tool for administrative management or for boosting productivity. This software is, in theory, used to streamline the company's work, in particular by making it easier to see internal workload imbalances and progress on projects. It acts as a filter for the employer, so that employees cannot surf online on certain websites or as a form of security so that they cannot access sensitive data or information. But the functionality of these programmes has expanded: geolocation, keystroke logging, monitoring time spent online on "productive" or "non-productive" sites, time connected to the company's servers, number of e-mails sent, identity of recipients, are all on the menu. Other software takes screenshots of computers every five or ten minutes or reveals "digital behaviour" to detect possible anomalies. This behaviour, which has been ramped up on a huge scale by artificial intelligence, can allow for much

more extensive monitoring. Most of this activity-tracking software is invisible to employees, who are subject to increasingly intrusive surveillance, which logically raises the question of its legality.

Use of artificial intelligence in recruitment

Using artificial intelligence in recruitment is a very difficult management choice, and one that is very tempting, as this is a time-consuming task and going through thousands of CVs, especially in large companies, is cumbersome. Some video interviews may help with recruitment (via Easyrecrue, Vera Virtual Agent, Smart ranking, HireVue, etc.), as they immediately provide information about the candidate's vocabulary or facial expressions. They can use three types of artificial intelligences to award a mark to the candidate: The richness of the candidate's vocabulary (are the words used commonplace or do they demonstrate a more rigorous use of language?), the 'prosody' or variations in the rhythm, tone and intensity of the voice, and finally the expressions. However, an analysis of artificial intelligence factors does not necessarily assess the competence of the candidate and this use and its results have no scientific basis and as such should be regulated.

Part V: Legal tools for the negotiation of AI

There is an entire legal arsenal available for challenging a company, a branch, a platform on the use and introduction of Artificial Intelligence technologies.

17. On the Executive Board

Artificial Intelligence needs to be discussed in the decision-making bodies of companies and public administrations if it is part of their strategy. In cases where it is not discussed by the executive board, and nothing has been said about its introduction, as is often the case, other forms of action are possible, in particular through Works Councils, (Social and Economic Committee in France), sectoral organisations or administrative bodies.

Call for an Ethics Committee to be set up

An ethics committee can measure and set the limits to be imposed on machines. For example, in June 2020, in France, the insurance company, CNP Assurances, set up an Ethics Committee for Artificial Intelligence. The company created a dedicated governance system and appointed an AI Ethics Officer. This committee reports to the Secretariat-General and the Financial Division. Trade unions have to be involved.

18. Within the sector

In terms of sector-specific negotiations, reference points already exist: the GDPR (General Data Protection Regulation), the independent European agreement of June 2020 by the social partners on digital transitions and the European declarations by the social partners in certain sectors¹⁰.

An example in **French banking sector**: the collective agreement of 5 February 2020 on vocational training. It provides:

The signatories highlight the importance of vocational training, both for companies and their employees. They set the following training priorities within the sector: to enable employees to maintain their skills in the face of economic, technological and organisational changes by anticipating, supporting and adapting to changes, in particular Artificial Intelligence, customer relations through the medium of digital technology and blockchain;

The assistance provided by the European General Data Protection Regulation (GDPR)

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR).

- On the European Union website.

¹⁰https://www.etuc.org/system/files/document/file2020-06/Final%2022%2006%2020_Agreement%20on%20Digitalisation%202020.pdf,

IndustriAll CEEMET, A joint statement on digitalisation https://www.ceemet.org/site/assets/files/2835/iall_-_ceemet_digitalisation_statement_09_11_2020_fr.pdf; joint declaration on artificial intelligence: UNI Europa Finance trade union federation and European employers in insurance: https://www.uni-europa.org/wp-content/uploads/2021/03/20210316_ISSDC_Joint-declaration-on-Artificial-Intelligence-1.pdf

Declaration by UNI Europa Telecom <https://etno.eu/downloads/news/ue-etno%20declaration%20ai.pdf>

The Regulation has been in force since 25 May 2018 (Article 99(2)) in all countries of the European Union. It applies to all companies, administrations and associations that process personal data. Articles 5, 40 and 88 of the Regulation address topics on the lawfulness of data processing, and on protection, collection, data quality, and codes of conduct, issues likely to form part of negotiations on AI. The GDPR was invoked in November 2020, when four British former drivers and one Portuguese driver accused the US application Uber of having “sacked” them by using an algorithm without giving them the right to defend themselves or to find out more, as required by Article 22 of the European Union’s (EU) General Data Protection Regulation (GDPR). Their complaint was lodged with a court in Amsterdam, where the platform has its international headquarters.

Make use of Article 40 of the GDPR

The Member States, the supervisory authorities, the Board and the Commission shall encourage the drawing up of codes of conduct intended to contribute to the proper application of this Regulation, taking account of the specific features of the various processing sectors and the specific needs of micro, small and medium-sized enterprises.

Associations and other bodies representing categories of controllers or processors may prepare codes of conduct, or amend or extend such codes, for the purpose of specifying the application of this Regulation, such as with regard to:

fair and transparent processing; the legitimate interests pursued by controllers in specific contexts;

c) the collection of personal data

d) the pseudonymisation of personal data;

e) the information provided to the public and to data subjects;;

f) the exercise of the rights of data subjects;

g) the information provided to, and the protection of, children, and the manner in which the consent of the holders of parental responsibility over children is to be obtained;

h) the measures and procedures referred to in Articles 24 and 25 and the measures to ensure security of processing referred to in Article 32;

i) the notification of personal data breaches to supervisory authorities and the communication of such personal data breaches to data subjects;

j) the transfer of personal data to third countries or international organisations; or

k) out-of-court proceedings and other dispute resolution procedures for resolving disputes between controllers and data subjects with regard to processing, without prejudice to the rights of data subjects pursuant to Articles 77 and 79.

Make use of Article 88 of the GDPR: the protection of individuals

Member States may, by law or by collective agreements, provide for more specific rules to ensure the protection of the rights and freedoms in respect of the processing of employees' personal data in the employment context, in particular for the purposes of the recruitment, the performance of the contract of employment, including discharge of obligations laid down by law or by collective agreements, management, planning and organisation of work, equality and diversity in the workplace,

health and safety at work, protection of employer's or customer's property and for the purposes of the exercise and enjoyment, on an individual or collective basis, of rights and benefits related to employment, and for the purpose of the termination of the employment relationship.

Those rules shall include suitable and specific measures to safeguard the data subject's human dignity, legitimate interests and fundamental rights, with particular regard to the transparency of processing, the transfer of personal data within a group of undertakings, or a group of enterprises engaged in a joint economic activity and monitoring systems at the work place.

Each Member State shall notify to the Commission those provisions of its law which it adopts pursuant to paragraph 1, by 25 May 2018 and, without delay, any subsequent amendment affecting them...

The European agreement between the social partners of June 2020 refers to this article and its importance when engaging in collective bargaining.

In France in 2019, an agreement at the National Sickness Insurance Fund (CNAM) concluded that a joint committee should be set up to prepare the deliberations of the Central Economic and Social Committee (CESC) on the data.

Working conditions and emerging risks.

Works Councils could draw on the work of the European Agency for Safety and Health at Work on emerging risks in this area: according to the agency, "Current approaches and technical standards aiming to protect employees from the risk of working with collaborative robots will have to be revised in preparation for these developments." ¹¹

¹¹ <https://osha.europa.eu/en/emerging-risks>

Teleworking: your rights on remote monitoring devices

In 2002, a European agreement on teleworking was signed by the European social partners, UNICE, UEAPME, CEEP and ETUC (and the Eurocadres/CEC liaison committee). Member States had to transpose it into national law. The agreement, in particular Article 6, provides for the right to respect for the privacy of teleworkers. *The employer is obliged to respect the privacy of the teleworker. To this end, the employer shall determine, in consultation with the employee, the time slots during which they may contact the employee. 94 CC 2005/49. If any kind of monitoring system is put in place, it needs to be proportionate to the objective and the worker must be informed about it. The introduction of such means by the employer must be subject to prior information and consultation of the works council or, failing that, of staff representatives in undertakings that have them.*

The European agreement signed by the social partners in June 2020¹² on digital transitions encourages the negotiation of provisions on the organisation of work, including teleworking.

In addition, several judgments by French courts refer to the right to respect for private life (Nikon judgment, Court of Cassation (Social Division), 2 October 2001, 99-42.942). Compliance with the requirements of the General Data Protection Regulation (GDPR), when the device affects personal data, is essential. Any monitoring must be justified, proportionate and fair, as pointed out in the 2002 European Agreement on Teleworking, which was transposed in France in 2005. The employer also has an obligation of loyalty to its employees. In principle, therefore, the employer cannot constantly monitor its employees (except in exceptional cases duly justified by the nature of the task). In any event, according to the French Data Protection Authority, it cannot carry out:

- constant monitoring by means of video (such as a webcam) or audio devices. This may include, for example, an employer's request to employees to log into videoconferencing throughout their working hours to ensure that they are present in front of their screen. Such a system, which places employees under permanent surveillance, is excessive. It cannot therefore be implemented, whether the purpose is to ensure security or to monitor working time. There are other, less intrusive means of achieving these purposes.
- Permanent screen-sharing and/or the use of keyloggers (software for recording every keystroke made by a person on a computer). Such actions are particularly invasive and represent the continuous and disproportionate surveillance of employees' activities.
- An obligation on employees to carry out frequent tasks to prove their presence in front of their screen, such as clicking every X minutes on an app or taking photos at regular intervals.

Whistleblowing

Directive (EU) 2019/1937 of 23 October 2019 provides for the protection of whistle-blowers, who are individuals reporting breaches of Union law. The European text acknowledges in particular a useful role for whistle-blowers in relation to the safety of products placed on the European market. It considers that companies involved in the manufacturing and distribution chain are the main source of evidence-gathering, making reports by whistle-blowers highly appropriate, as they are much closer to the source of possible unfair or unlawful practices in the manufacture, import or distribution of dangerous products. This justifies the introduction of whistle-blower protection with regard to safety requirements for both products and privacy and personal data. Employees are protected as whistle-blowers if, for example, they testify to bias or discriminatory effects resulting from algorithms. This directive must be implemented and transposed on national laws in all Member States by the end of 2021 (see for monitoring the WIN platform on Eurocadres site)¹³

¹² <http://www.irshare.eu/fr/ue-accord-cadre-des-partenaires-sociaux-europeens-sur-la-numerisation- fr 1277.html>

¹³ <https://www.eurocadres.eu/news/new-civil-society-monitor-on-the-eu-whistleblowing-directive/>

19. Platform workers

The right to collective representation for platform workers

In France, Law No 2016-1088 of 8 August 2016, known as the El Khomri Law, recognises collective rights for these workers, such as the right of association. This has enabled platform workers to set up trade unions. For the time being, however, the right to collective negotiation is not recognised.

The Frouin report submitted to the French government at the end of 2020 now suggests that platform workers should be paid through freelance contracts or should form part of an employment cooperative, and that a national election should be held to enable workers to be represented.

Europe: a number of court rulings on platform workers

In Europe, a number of rulings have been issued on the digital platform sector:

- **In Italy**, the courts gave platforms three months to reclassify the contracts of delivery riders/drivers.
- **In Spain**, after the Supreme Court reclassified cycle delivery riders as employees in September 2020, the government announced, following an agreement between trade unions and employers, a decree giving **delivery drivers/riders the status of employee**.
- **In the United Kingdom**, Uber, under pressure from judges, announced on 16 March 2021 that the company would give its 70 000 British drivers a status enabling them to receive a minimum wage. This status is half-way between that of a self-employed person and that of an employee.
- **In France**, in early 2021, the Paris and Lyon appeal courts rejected several requests from self-employed workers on digital platforms for their contracts to be reclassified as employment contracts.

In particular, a Deliveroo driver/rider had requested that their contract be reclassified and had argued that both the contractual conditions and the terms of performance of the relationship were typical of a permanent relationship of subordination.

However, the Court of Appeal ruled out any subordinate relationship, arguing that the driver had: freedom to choose their delivery days or slots;

- the option of providing a service at a time that suited them;
- the option of working with other platforms
- the option of subcontracting delivery services, etc.

This decision does not run counter to the order of the CJEU of 22 April 2020 (Case C-692/19). **The CJEU rejected reclassification because the drivers/riders enjoyed:**

- freedom to choose when and where they worked;
- freedom to choose their working hours;
- freedom to end the partnership whenever they wanted;
- freedom to refuse a delivery job;
- freedom to work with a competing platform;
- freedom to subcontract their work.

The right to collective bargaining;

In Ireland, following a case brought by the Irish Trade Union Confederation, the European Committee of Social Rights (ECSR), an expert committee monitoring the European Social Charter, concluded, in a decision of 12 December 2018, that self-employed workers had a right to collective bargaining. However, the Committee's decisions are not binding, which makes this monitoring considerably less effective.

Remain vigilant about AI provided by subcontractors

The draft European directive on due diligence is inspired by the French law No 2017-399 of 27 March 2017 on the Due diligence of parent companies and of contracting undertakings. Companies concerned must draw up, publish and implement a diligence plan to prevent serious risks to human rights and fundamental freedom, human health and safety and the environment arising from their activities and those of their subsidiaries, subcontractors and suppliers, both in France and abroad.

Thus, parent or contracting companies that use subcontracting by means of micro-labour (such as carrying out a web search, transcribing a sentence, captioning a photo, answering a questionnaire on a computer or a smartphone, which pays a few cents) could in some cases constitute serious breaches of individuals' human rights, fundamental freedoms or health and safety.

If such breaches are found, and after formal notice, "any person with an interest in bringing proceedings" may then refer the matter to a judge to ask them to order the company to meet its obligations, subject to penalties, if necessary. But this draft directive is still far from being adopted.

Recourse to the Commercial Code

The **Uber Elite** judgment delivered by the Court of Justice of the European Union on 20 December 2017 in the field of commercial law states that the company's couriers were dependent on the platform and that Uber was therefore a transport company. Consequently, one can conclude that this dependence gives trade unions the right to negotiate collective labour agreements. This fact excludes it from the scope of Article 101 TFEU, which governs common rules on competition, taxation and the approximation of laws.

In October 2021, EESC worker's group published a study on the definition of platform workers exploring the situation of these workers in different member states and giving possible regulatory solution.¹⁴ A European Commission legal initiative on their rights is expected by the end of 2021.

¹⁴ <https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/definition-worker-platform-economy-exploring-workers-risks-and-regulatory-solutions>,

20. Recourse to EU rules

Request the information/consultation of workers under Directive 2002/14/EC

- Directive 2002/14/EC establishes a general framework for informing and consulting employees in the European Community. It lays down minimum procedural standards for the protection of workers' rights to be informed and consulted on the economic and employment situation affecting their workplace. This framework covers:
- a) undertakings employing at least 50 employees in any one Member State, or
- b) establishments employing at least 20 employees in any one Member State.

The directive provides for:

- information on the recent and probable development of the undertakings or the establishment's activities;
- information and consultation on the situation, structure and probable development of employment within the undertaking or establishment and on any anticipatory measures envisaged, in particular where there is a threat to employment.

c) information and consultation on decisions likely to lead to substantial changes in work organisation or in contractual relations, including those covered by the Community provisions referred to in Directive 98/59/EC on collective redundancies and Directive 2001/23/EC on the safeguarding of employees' rights in the event of transfers of undertakings, businesses or parts of undertakings or businesses. Member States may entrust management and labour at the appropriate level, including at undertaking or establishment level, with defining freely and at any time through negotiated agreement the practical arrangements for informing and consulting employees.

Check compliance with the ISO standard on health at work and robots

The standard ISO/TS 15066:2016, created by the International Organization for Standardization on collaborative robots, and which is aimed at manufacturers, integrators and users, provides guidelines for designing and organising a collaborative workspace and for reducing the risks to which people can be exposed. Workers must be trained to use AI and robotics, to work with them and, in particular, to stop them in an emergency (the "emergency brake principle"). This is stated in Article 4(1,4) of the opinion of the European Economic and Social Committee on *Building trust in human-centric artificial intelligence*, rapporteur: Franca Salis-Madinier.

Requesting information on health and safety at work

Directive 2009/38/EC of the European Parliament and of the Council of 6 May 2009 concerns the establishment of a European Works Council or a procedure in Community-scale undertakings and groups of undertakings for the purpose of to inform and consult employees.

At the European level, Directive 89/391/EEC of 12 June 1989 aims, according to its own title, to "implement measures to promote the improvement of the safety and health of workers at work". Its hard core is prevention. This directive applies to all sectors of activity public sectors of activity: industrial and service activities, but also educational, administrative and leisure activities, but also educational, administrative, leisure activities, etc., but not in the "public service" when "particularities" of the work are not taken into account but not in the "public service" when "particularities inherent in certain specific activities specific activities [...] prevent" its application, and this "in a restrictive manner".

At present, self-employed workers are excluded from its application because the definition excluded from its application because the definition of worker in this directive is too restrictive (see Article 3(a) of the Directive) and does not allow to include self-employed workers.

Article 5 of this directive of 12 June 1989 aims at a protection of health which relates to "all workers protection which relates to "all aspects of work". France considers in its transposition law of 31 December 1991 that the aim is to prevent occupational risks. Article L. 4121-1 of the Labour Code states that "the employer shall take the necessary measures to ensure the safety and protect the mental and physical health of workers". This directive provides for information on the existence of risks to ensure that workers are aware of awareness of these risks by the worker. In Article 6, it makes the employer's responsibilities to include both the prevention of occupational prevention of occupational risks as well as information and training on these risks.

Recourse to the Consumer Code

Articles L224-42-1 and 4 on retrieving electronic data following service contracts

The right to portability and the right of access also stemming from the GDPR offer individuals the opportunity to retrieve some of their data in an open and machine-readable format. In this way, they can easily store or transmit them from one information system to another, to re-use for personal purposes.

Check the company's liability for defective products

Directive 85/374/EEC on liability for defective products, dating from 1985, states that a manufacturer is liable for damage caused by a defective product. However, in the case of AI-based systems such as self-driving cars, it may be difficult to prove the product's defectiveness, the damage that has occurred and the causal link between the two. In addition, there is some uncertainty about how and to what extent the Product Liability Directive applies in the case of certain types of defects, for example if these result from weaknesses in the cybersecurity of the product. A draft product directive was proposed by the European Commission in April 2021 to further develop the 1985 directive.

Guide workers towards the Rights Defender

The Rights Defender, where one exists, can be referred to in the fight against discrimination and promotes access to the rights of victims of such acts. You can refer a worker to the Rights Defender if you consider that they have been discriminated against. The alleged perpetrator of such discrimination may be a natural person (an individual) or a legal person (an association, a company, etc.), a private person (an undertaking) or a public person (a government department, a local or regional authority or a public hospital service).

It is up to the worker to refer the matter to the Human Rights Defender (the trade union can direct them to the HRD), who will sound the alarm in the fields of health, the environment, health and safety and respect for fundamental rights.

Guide workers towards the labour inspectorate

Labour inspectors have discretionary powers as to the action they intend to take in response to the offences they find. Their decisions depend, in particular, on the seriousness of the infringement, the circumstances in which the infringement was discovered, the good faith of the employer and its past record.

The Labour Inspectorate is regularly called upon when the boundaries between self-employed workers and employees are challenged. In February 2020, the Paris Public Prosecutor's Office received a report from the Labour Inspectorate denouncing alleged infringements committed by Deliveroo, a home meal-delivery platform, which acts as an intermediary between restaurants and private individuals. Through Deliveroo, the Labour Inspectorate is challenging "uberisation". According to the Labour Inspectorate and the Social Security Contribution Collection Office (URSSAF), the platform does not

employ self-employed delivery workers, but salaried workers, who should not be registered as micro-entrepreneurs. The matter was referred to the Public Prosecutor's Offices in Paris and Nantes. URSSAF estimates that the amount of contributions not paid in 2015 and 2016 exceeds EUR 6.4 million. The case is currently 'under consideration' by the Public Prosecutor's Office.

According to a Uni Europa press release, in Spain, the Labour Inspectorate believes that 4 000 Amazon delivery workers have been wrongly classified as self-employed. It estimates that Amazon is liable to pay six million EUR in social security contributions.

Launch a collective action

Since the entry into force of the GDPR, representative trade unions may take group action on breaches of the law on personal data (Article 80 GDPR (EU) 2016/679). This might apply to employees who believe they have suffered harm as regards the protection of their personal data, in particular due to an overly intrusive system of evaluation and monitoring. They could then call on a representative trade union organisation, which would then bring a group action before the judge (Article 37, Law No 78-17 of 6 January 1978). This is conditional, however, on the breach being due to the controller (e.g. the employer or the digital platform) or to a sub-contractor (e.g. the company or person responsible for managing the employees' personal data) and on at least two workers having suffered moral or material damage as a result (Article 4, 7. GDPR (EU) 2016/679). The judge may, if appropriate, order the termination of the evaluation or monitoring system that has led to a breach of personal data and compensate the workers involved in the group action.

By way of conclusion

As the European trade union confederation, CFDT-Cadres is convinced that Artificial Intelligence offers opportunities and at the same time involves risks. To limit risks, this technology needs to be managed and governed so that its introduction benefits workers and citizens. AI applications, as used and implemented in organisations, must be compatible with respect for fundamental rights. The proposal for European regulation goes in the right direction but it should better regulate AI used in workplaces. This Act must require that the assessment of algorithms is realized by third party independent bodies. Humans must have the last say and it is crucial that human decision-making is preserved when it comes to machines. In workplaces, it is essential to involve HR and the social partners and to train social stakeholders in the ethical and social challenges of AI. The tools for social dialogue and negotiation on this technology exist and must be made use of, at all levels before the introduction of this technology. Technological development can and must contribute to economic and social progress and to a just green transition. Where smart labour-machine interaction is concerned, humans must never become subordinate to machines. On the contrary, technology must be used for greater participation in, responsibility for and ownership of production processes by humans, so that, as emphasised in the Constitution of the International Labour Organization (ILO), labour provides those who exercise it with the satisfaction of giving the fullest measure of their skill and attainments and make their greatest contribution to the common well-being.

Upcoming UE French Presidency in January 2022, could give great contribution to advance on the internal market regulation on crucial digital issues. Starting from the regulation of AI, as well as on the rights of platform workers, without forgotten the regulation of gatekeepers platforms operating in UE market by the DSA and DMA acts.

Interviews

Vincent Gimeno

- ❖ **Vincent Gimeno is shop steward at the Global company, Orange and CFDT referent for executive employees. He is a union representative on the Europe and Orange World group committees.**

"We must act in a union upstream and ensure the transparency of algorithms".

How is the introduction of AI going in the Orange group?

At Orange, artificial intelligence has never been, despite our repeated requests, an element of social dialogue. Staff representative institutions have never been consulted on the introduction of these AIs.

The CFDT has initiated discussion groups on the subject, from which recommendations emerge that we would be ready to share with the company.

At the same time, Orange is deploying artificial intelligence to increase the operational efficiency of the customer relationship of Orange Bank and Orange France. 80% of Orange Bank calls are handled by a chatbot and there are also chatbots at Orange France.

During the Covid crisis, the group's management unilaterally decided to introduce AI to optimize the Orange network, because the volume of data transported (emails, videos, teleworking) had exploded. This is possible because networks evolve from physical elements (hardware) to "all computerized". These optimizations, among others, combined with the drop in video quality for example, have made it possible to keep our networks operational by absorbing the 40% increase in traffic; in the future, AI will enable the predictive maintenance of these networks.

Concretely, how does this translate?

The lack of upstream consultation leads to difficulties observed in the implementation. Indeed, being faced with the fait accompli of deployments, rather than anticipating the impact on people and on business processes upstream, we must intervene downstream.

For example, if AI can handle simple tasks, how will we train new hires and teach them their trade? How to take into account the cognitive overload induced by the almost exclusive treatment of complex cases by client advisers?

Will AI replace customer advisers, or help those advisors in the act of sale, with many more offers in mind, to find the most suitable for the customer?

For us, it is important that humans keep the interpretation and the relationship with the end customer. Today there can still be human-AI interaction. But tomorrow, when AI has made progress, what will it be?

Today there are natural dialogue engines, which we do not know if it is an AI or a human speaking. Tomorrow, therefore, we risk no longer distinguishing an AI from a person.

The company has a responsibility to tell the customer if they are talking to a human or a machine.

With the softwarization of networks, humans could no longer intervene. These will be computers talking to computers.

If AI tomorrow performs multi-degree complex tasks autonomously, it is imperative that humans reserve the last word.

CFDT Orange wants a committee of experts to be set up to meet to validate the relevance of the data sources and the transparency of the algorithms. She asks that there be a "go" or "veto" given by the social partners. We do not deploy an AI in a service or a process, without knowing, for whom, how, with whom, why, and having anticipated the support of employees.

You had not signed an agreement on the digital transition?

The CFDT has in fact signed an agreement on "supporting digital transformation" at Orange. While the right to disconnect appears with the rights and duties of employees, the rights to access, forget and rectify employee personal data related to internal applications have not been fully implemented. The preliminary steps before launching new employee services have not always taken place, nor have studies of inappropriate digital uses at a department level. Likewise, the application allowing everyone to be aware of their uses of digital means has been slow in coming.

In this agreement, a national committee for digital transformations was created. It made it possible to work on prospective aspects in the medium and long term and to see the initiatives and new services linked to the digital transformation of the group presented upstream. The committee, with expert insight, could make recommendations. This committee did not last.

We believe that today, we should focus on the relevance of the use of AI according to the targeted processes and professions, the complete transparency of the algorithms, developed internally or by a service provider and the quality of the data for avoid bias.

From the outset, support must be provided for employees in the transformation of trades and skills.

The company, lately, has focused too much on interpersonal skills and the adaptability of are employees. The implementation of AI, on the contrary, shows the importance of know-how in training AIs, supporting teams and making operational adjustments during implementation.

We are all in a context where 50% of professions will be transformed and some will disappear by 2030. There is a strong stake for the employees, the human capital of the company, who alone will be decisive in the success of the transformation.

What are you going to ask?

In fact, AI is a computer program designed by human developers and based on a data store.

The quality of the data pool and the choices of the developers in the algorithm induce how the AI will react. There may be biases.

We want full transparency and sincere exchange within a joint committee on data and algorithms. If we are not transparent about the biases, the data source, this can cause problems during implementation.

On the other hand, it is better to support employees towards new jobs and skills, including managers, who have an important role to play in understanding jobs and helping to understand transformations. It takes a real GPEC, whereas Orange does not have a valid GPEC agreement signed today.

What about the Orange charter, which has just been announced by management in the press?

The inclusive charter is mainly a marketing object. There is no link with an operational implementation of AI, the commitments are very vague.

Won't you try a new digital deal again?

Today we have a problem with the social calendar because of the Covid, which is delaying the negotiations. It is unlikely that we will enter into negotiations on this issue before the second half of 2021.

We wish to negotiate, as indicated, around the transparency of the deployment of AI in the enterprise. It is necessary to put up safeguards to its deployment. AI deployments involving all of the group's subsidiaries around the world must be a worldwide agreement.

If we do not explain AI, it can become a major reason for fear and rejection of employees.

We must take into account that AI can have a beneficial role in fixed and mobile networks, in dimensioning, optimization and therefore in consumption. However, these deployments must be done transparently with the IRPs and the SOs and not unilaterally.

Abel Gouttenoire

- ❖ **Abel Gouttenoire: “The law helps employees retrieve their personal data. It can be very useful”.**

Abel Gouttenoire holds a degree in private law. He is part of the Critical Law Research Centre’s team researching “Changes in work and organisations in times of crisis”. He is currently writing a thesis on “Algorithmic rules and labour law” at Lyon 2 Lumière University. He is research analyst in social law at the CFDT.

How can an employee or worker have access to their own personal data when these have been processed by an AI algorithm?

Simply by invoking the right of access under the GDPR and the Information Technology and Freedom Act. Employees can exercise their right of access, to information, to transparency and to the portability of their personal data. Conversely, they also have the right to disconnect or, what is less widely known, the right to human intervention when automated processing (such as AI) has significant or legal consequences for them. In such cases, workers can challenge the decision taken by the AI by referring to that person.

These rights, and in particular the right of access, have not yet given rise to litigation or pre-litigation. There are apparently very few labour law lawyers who use the right of access to collect evidence and/or to invoke it before the court.

There is a glaring lack of awareness of the right of access among labour lawyers. The fact remains, however, that it exists.

Does the fact that someone may have been filmed or had their image processed by facial recognition software make it difficult?

No. When an employee faces disciplinary proceedings because of CCTV footage, they do not usually have access to the film or images concerned. However, they can exercise their right of access to their information under Article 15 of the GDPR, even if they have left the company. They may also demand to see this evidence when a facial recognition device tries to identify their potential or emotions (for example, their facial expressions). Employees can thus ask their employer for their personal data resulting from direct processing (images, videos, voice), or indirect processing (e-mail location data, connection data, computer IP address, etc.).

More interestingly, employees may also request any information generated or produced from their data that algorithms might have used. This means profiling or predictive decisions. For example, a candidate for recruitment may request access to their data used in recruitment by artificial intelligence (for example, the easyRECrue software) and obtain the analysis of their video interviews and the resulting decision. If algorithms rank or evaluate their application, candidates have the right to access the way they work and to understand the resulting decision. For example, their marking by Benchmarking software or their rating by ranking software may have legal effects, such as a salary increase or promotion. As a result, the worker will be able to ask on what criterion/criteria and why this/these algorithmic assessment(s) have had this/these consequence(s). In disciplinary cases, if an employee is accused of not having been present at work, they are entitled to request data proving their absence or geolocation data.

And what happens when decisions have been taken on the basis of data analysis?

If a worker is fired or did not get a raise because of an algorithm, the worker can ask for the data that helped the employer make its decisions. In the case of video surveillance, it is advisable to specify times

and dates, for example, or to avoid someone requesting a copy of personal data on their whole career. No reason is needed for the request.

How long does this procedure take?

The employer has a maximum period of one month (GDPR Article 12(3)) to reply to the employee, unless it is a complex request, where an extension of two months is possible. This allows the employee to gather evidence before their grievance is time-barred. If the employer refuses or is not able to explain the intrinsic workings of the AI, it will have to explain how AI recommendations could have produced this effect or decision for the worker.

What are the sanctions for the employer?

These rights are all the more interesting as the employer can lose up to 4% of the company's worldwide turnover, following a complaint to the Data Protection Authority. The right to personal data is a right that exerts considerable power. However, this right is limited by a few aspects:

1/ when its exercise affects the interests of third parties (e.g. an e-mail involving a colleague of the employee); 2/ If it affects the secrecy of correspondence or business confidentiality. This right derives from the Data Protection Act, has a European framework (GDPR) and carries very significant penalties. Exercising the right to personal data makes it possible to rebalance the employment relationship. ***In addition, companies must be able to demonstrate, through impact assessments, that the high-risk algorithms they use on employees (recruitment, evaluation, surveillance software, etc.) comply with these regulations.***

Emmanuelle Soustre

- ❖ **Emmanuelle Soustre (French National Sickness Insurance Fund, CNAM): “Employers are playing dirty when it comes to the liability of medical practitioners with regard to medical confidentiality”. ”**

Emmanuelle Soustre is a medical practitioner for the National Sickness Insurance Fund (CNAM). She is responsible for relations with health professionals in the dental sector. Dr Soustre is a union representative for the National Health Insurance Fund (CNAM) and President of the National Union of Social Organisations Management Staff (SNPDOS). She shares her view of the issue of data on insured persons at the CNAM.

What are the problems affecting data on insured persons at the CNAM, especially since they are closely linked to medical confidentiality?

At the CNAM, with regard to health data on insured persons, the employer is playing dirty when it comes to the liability of medical practitioners with regard to medical confidentiality and most recently by listening in to COVID-19-related calls. This practice takes two forms: getting around certain difficulties relating to medical confidentiality and managing the implications of Contact Tracing.

What do you mean by getting around medical confidentiality?

A few years ago, the CFDT had to negotiate a framework agreement at the CNAM with the employer on citizens' health data.

Medical practitioners guarantee the medical confidentiality inherent in the health data of which they have knowledge. The medical profession has a code of ethics, which makes its work subject to medical confidentiality. This medical confidentiality applies, except where, for example, there is evidence of physical abuse of vulnerable persons or notifiable diseases, such as in the case of COVID-19, where a decree waived this obligation. In November 2019, in the framework agreement on occupational pension funds (IORPs), the employer extended the Committee's powers in relation to the activity of medical practitioners in the field of data protection. The Committee found that the employer had tried to get around the problems of medical confidentiality in certain activities. The CFDT alerted the management to the shortcomings of this organisation and referred the matter to the Committee on the activity of medical practitioners to request that the CNAM establish a legally robust data management system for insured persons.

Who has medical confidentiality in Contact Tracing?

During the COVID-19 pandemic, Contact Tracing allows CNAM to contact index patients, to alert them, test them, protect their contacts and prevent the disease. As part of the management of the health crisis, CNAM has put in place an approach to improving the telephone tapping of the content of the conversations of medical practitioners, in COVID-19 teams, who are carrying out contact tracing. In relation to COVID-19, medical secrecy was lifted by decree and these phone-taps revealed that affected patients or families referred to a wide variety of medical subjects on the phone in addition to COVID-19, and sometimes discussed a number of other people. CFDT alerted CNAM to the fact that having a third party listen in to the details of conversations breached medical confidentiality. Moreover, it considered that this phone-tapping raised the issue of the protection, recording and retention of data on insured persons.

Are there any other security issues around data?

There is the question of the maintenance of the IT tools that contain these health data. Those in charge of maintenance may have access to and disclose sensitive data. How can medical confidentiality be ensured?

Very recently, the Minister of Health, Olivier Véran, indicated that he did not want the storage location for data from the Health Insurance scheme, which is the largest database in Europe, to be hosted by Microsoft. Furthermore, the anonymisation of data could be useful to CNAM, as part of a public health approach, in order to better identify, for example, the huge increase in obesity and diabetes, which is a burden on finances and, if it results in a better understanding of these illnesses and better treatment, this would be a potential saving. Staff representative bodies have no recourse in these matters.

Philippe Saint-Aubin

❖ **Philippe Saint-Aubin: “The European Commission can decide to make an AI standard mandatory in 27 countries!”**

Philippe Saint-Aubin represents the CFDT on the French Economic, Social and Environmental Council. He is part of a CFDT working group on artificial intelligence. He is particularly concerned with the issue of standards and he is a member of the European Committee for Standardization (CEN).

Where are artificial intelligence standards developed?

Artificial intelligence standards are being developed at two levels in the world. It is done in Europe through the European Committee for Standardization (CEN). At international level, this is achieved through an international standardisation body. These two organisations are as concerned with yoghurt and the size of camembert cheeses or railway gauges as they are with artificial intelligence.

Do these standards have to be applied?

No. For the time being, the European Committee for Standardization (CEN) and the international standardisation body produce more ‘working documents’ than texts that are binding on companies. If a European company does not comply with their AI standards, it will not be penalised. The question is whether the standards of these two bodies in the field of artificial intelligence will be subject to a label in the future. And whether this label will be enforceable. The European Commission has the power to decide that a European standard will become mandatory in 27 countries in this matter.

What types of standards are currently being created?

A whole host of AI standards are being created, but these are purely technical at the moment.

Examples of technical AI include how AI will distinguish between different accents in spoken languages or how machines will talk to each other (the data format, codes, etc.). But as the devil is in the detail, there are also purely technical standards that deal with data management and privacy...

What is Europe’s approach to standards?

In AI, Europe is interested in quality, trust and ethics. Compared to the US and China, it is trying to adopt a more human-centred approach. At the request of the European Commission, the European Committee for Standardization (CEN) has drawn up a roadmap on what it thinks is useful in terms of standards and subjects. It points out that quality, data management, security and privacy, ethics, AI systems engineering, safety and liability need to be addressed.

These are all potential topics on the table of the Standardization Committee. For its part, the Commission can decide to make a European standard mandatory in 27 countries. At European level, there has been similar work to the European Committee for Standardization's roadmap in the field of cybersecurity. It should be remembered that this committee brings together all the standardisation bodies of the Member States, including AFNOR for France.

At global level:

At the global level, there are also standards in the field of AI, but again, they are purely technical (message formats, system descriptions).

Does this mean that standards have no impact on employees’ elected representatives in companies?

For elected representatives within a company, of course, these issues have no impact. But they may still be of considerable importance to them. Surveillance in the context of telework, via AI, will be a relatively important subject, for example. This is why the European Trade Union Confederation (ETUC) has a technical committee working on AI standards. If we don't have standards at the national level, companies will take over, with their own standards. And if that happens, anything is possible.

Emmanuel Gaubert

- ❖ **Emmanuel Gaubert belong to Orano Projets, a subsidiary of Orano Group : "when it comes to Artificial intelligence, it is always a question of learning, questioning and making sense".**

How is AI received at Orano Projets?

For Emmanuel Gaubert, "whether Artificial Intelligence (AI) or similar techniques are present or not in the company, the three laws of unionism at Orano Projets are the same in practice". It's always about learning, questioning, and making sense. The practice of the CFDT shows that when it comes to artificial intelligence, Orano Projects elected officials are relevant in the same way as on other subjects at work, with the same tools, and mainly on classic transversal subjects.

The shop stewards and elected officials get information on the ground. Employees, experts, proofs of concept, presentation of professions, publications, are the classic channels explored. This first phase corresponds to a time when Orano's union section began to discuss AI and more broadly digital transformation, which ensured the group's self-training. The union section advised an employee how to manage his training process lasting several months in artificial intelligence. The training took place after the company had also invested in AI training for several safety or civil engineers, for example.

Are there any effects specific to AI at Orano Projets on work?

The CFDT believes that artificial intelligence is causing at Orano Projets a change in work like any other, but profound.

Elected officials ask questions in the CSE on training and the volume of hours planned, and in the central CSE on the change management strategy. The CFDT suggested starting with methods based on the appointment of change agents and local referent leaders and this method was adopted.

Finally, elected officials give meaning to artificial intelligence through questions or analyzes. In this case, in 2019, the CFDT perceived a delay in the implementation of the AI. Management responded that they took the time to analyze to decide that there wouldn't be an AI department, but AI would be in the hands of everyone in the trades for which it is relevant. The CFDT notes that there is a commercial sense here, a sense of customer orientation and business know-how (especially as AI tools become accessible to businesses directly). The CFDT and management share the vision that data management / acquisition is a priority, and that the role of the businesses is essential at this level.

Do you identify any particular challenges posed by this technology to Orano Projets?

As for making sense of all this ... There are ethical issues in other companies (the CFDT does not see any in the applications used, but it remains vigilant). Today, beyond the Corporate Social Responsibility commitments, the CFDT continues exchanges and discussions with employees on the meaning of their work, its usefulness, their projections, etc. In conclusion, AI and digital transformation especially reinforce the need for dialogue with elected officials in companies.

Pascal Leblay

❖ **Pascal Leblay: “It is time for us to train ourselves in AI!”**

Pascal Leblay is secretary of the works council at BPE (French Banque Postale's private bank) and of the CFDT banking-insurance union in Haute-Normandie, as well as secretary of the Banque Postale group committee.

Since February 2019, Pascal Leblay has written two publications: the first one explains Artificial Intelligence to the average reader, and the second assesses the impact of AI on the banking and insurance professions.

How long have you been passionate about Artificial Intelligence?

For four years I discovered AI at a CFDT conference. And I realised two things: first, AI is like a child with an IQ of 140: despite its potential, if we teach it nothing, nothing will come of it and at worst it will make rash judgements. Secondly, there is no AI training for staff representatives and that suits management, which have hijacked the subject. Our efforts must therefore focus on training staff representatives to avoid any opacity on this subject. How can we judge a case concerning a matter we don't understand?

How is AI perceived in the banking world?

In the world of banking, it is unfortunate that some employers only see AI as an opportunity to cut costs. But AI can also enable employees to do their jobs better. It can eliminate repetitive, boring and stressful tasks.

A few years ago, the Watson robot was introduced as a conversational agent (email parser) at the Crédit Mutuel bank and employees were quite satisfied with it. Compliance checking has become an increasingly significant aspect of working time. Ten years ago, 80% of employees' time was spent on business and 20% on administration. Today, these proportions are reversed. The changes that the risk and compliance professions will undergo in the coming years are among the major questions that remain difficult to answer at the present time. The gradual automation of control and analysis tools, coupled with the proliferation of regulations, have generated high demand for recruitment at the bank, but this will soon run out of steam. In compliance checking, the proportion of activities that can be entrusted to the machine remains unknown. Investing in the digitalisation of compliance means making employees' jobs easier. The bankers who manage to include sales people in their core business will win the battle, thanks to AI. If the option chosen is to go digital just to cut costs, our jobs will certainly be at risk.

What can AI be used for?

Watson version 1 dates back to 2016. The robot was used that year as an email parser to help Crédit Mutuel customer service advisors respond. The robot sorted through requests for appointments and proposed appointments to fit each customer service advisor's diary. The employee kept control by checking and validating the robot's work. The AI also interprets a customer's lifestyle and automatically checks the consistency of the information provided (taxable income, salaries, expenses) on the basis of automatically collected information. For the time being, there is no AI regulator with a legal and ethical framework, and this type of analysis is not covered by the regulation on the protection of personal data. The trend is towards giving financial advice, where AI will be an assistant reminding people of the tax terms and conditions relating to financial legislation, the legal choices in relation to the civil code, etc. It should then be able to answer any question on health insurance and provident funds.

This means that any technological advance in the company that modifies working conditions or jobs should be subject to information and consultation with the staff representative bodies.

After the Crédit Mutuel group, which bank is the most advanced in AI?

The Post Office. The Post Office is very advanced but in terms of mail delivery by AI. The Post Office purchased Probayes, the owner, among other things, of software that can read envelopes, in particular when a letter is missing and is able to correctly rewrite an address. 90% of parcels and mail arriving in France now need to be traceable for Tracfin monitoring purposes. The software will be able to work out when mail regularly arrives from a particular country or place with a particular weight. It will be able to identify when the same mail arrives several times from an identical location. It is an EU anti-money laundering directive that requires this monitoring and it is very useful for Tracfin. Mail arriving at airports is read immediately by AI. AI puts the address the right way up and reads the postcode. The mail is then sent to a distribution centre, a postal delivery person, and a delivery route. With the Digital Euro, only cryptocurrencies can escape European monitoring, as they can be bought from anonymous accounts.

Any other banks?

BNP has made a breakthrough with the IBM blockchain facilitator for Tracfin and Lab management. The blockchain is a digital safe, in which anything placed inside can no longer be changed. All documents in the blockchain are verified originals. Being able to verify the validity of a document with few errors of course allows "many other applications". In 2025, information sharing between banks will be made standard practice by European regulations. Banks will have to deal with the issue of their positioning and resolve the problem of data management and **their exploitation**.

Lastly, there is a file (FICOBA) of all accounts opened in a person's lifetime at the Banque de France. This is accessible to the customs and tax authorities, Tracfin and several state agencies.

Who can stop this tracking of citizens?

It is Europe that must say "stop, we are going a bit too far". AI is now creeping into every area of life. In banks, many of the back-office tasks, control and risk analysis could disappear. Take the example of Belgium, which had two problems: too many bankers and not enough healthcare workers. Banks' management, shored up by government subsidies, has supported this radical change to the profession and has provided financial incentives for mobility, and the result has been quite conclusive.

What about employment in banks?

Between 2006 and 2016, the number of employees in banking compliance tripled and, according to the *Observatoire de la banque*, [the Banking Monitoring Centre] 20% of employees will see their jobs disappear by 2025 and 50% will see them change radically. Since 2010, French banks have lost 4% of their staff. After the financial crisis, staff numbers fell, but this was masked by the increase in the number of staff in risk/compliance call centres.

Now, we are seeing a slow but steady erosion of the workforce because 80% of back-office operations can be automated. In terms of job creation, the Post Office had the good idea of creating a digital and AI incubator, which includes an open class for employees. It believes that an engineer recruited from outside the AI field is very expensive, and it makes more sense to harness the potential of its 270 000 employees. A Google engineer who created the duplex robot was given a bonus of USD 100 million.

Dominique Desbois

❖ Dominique Desbois: “Test AI black boxes, test them and test them again”.

Dominique Desbois is a research engineer at AgroParisTech and is a CFDT union representative at the National Research Institute for Agriculture and the Environment (INRAE).

He is also a member of the editorial board of *Terminal*¹⁵, an analytical journal that looks at the impact of computerisation on society. In that capacity, he is the French delegate to the *Information, Communication & Society* Technical Committee (TC9)¹⁶ of the International Federation for Information Processing (IFIP)¹⁷, a United Nations professional organisation.

How can AI affect our social and economic environment?

At the heart of technologies such as robotics or pattern recognition, AI assists, supplements and even surpasses a number of human cognitive abilities in a way that is both technically and economically efficient, whether in production processes in the automotive sector, in assisting human operators in managing high-risk installations, or in intermediation in the distribution or personal services sectors.

Does AI change our lives?

Of course, and quite often without our knowledge. For example, in the field of health. Deep learning techniques can now be used to train a neural network to detect melanomas on photos of people's skin and diabetic retinopathy on eye fundus images.

In our daily lives, 'bots' are multiplying: for sorting postal mail¹⁸, filtering our unwanted emails or analysing our Internet footprint, for managing preferences, queues and taking reservations on digital platforms, these chatbots, which are capable of processing natural language (written or spoken) can now carry out certain relationship management tasks. This applies to carers in residential care facilities for dependent elderly people¹⁹.

Facial recognition is commonly used during police checks, particularly at airports, and by some countries in the management of demonstrations using surveillance cameras, either fixed or attached to drones, using biometric pattern-recognition techniques similar to those developed for fingerprints.

In the energy sector, EDF offers its industrial customers something called *Metroscope* - an energy diagnostics solution that uses AI techniques.

What happens if AI gets it wrong?

The consequences are by no means harmless: biases can be generated by the database on which an algorithm is trained (the learning base). In 2018, Amazon was forced to review its automated CV selection system after finding that it systematically penalised the CVs of women. The reason for this is that the learning base reproduced an imbalance in gender distribution, because it was built on the

¹⁵ *Terminal* is committed to multidisciplinary thinking on the cultural and social impact of Information and Communication Technologies (ICT). This journal analyses the challenges of ICT in terms of individual freedoms and sustainable development. When publishing its articles, the journal works with university laboratories and with independent citizens' associations and contributors.

¹⁶ ifiptc9.org/

¹⁷ *International Federation for Information Processing*, <https://www.ifip.org>.

¹⁸ Y. LeCun *et al.*, « Backpropagation applied to handwritten zip code recognition », *Neural Computation*, 1989, 1(4) : 541-551.

¹⁹ [Zora, the robot solution helping the elderly \(lemonde.fr\)](https://www.lemonde.fr/planete/article/2018/09/11/zora-the-robot-solution-helping-the-elderly_5111111_1651180.html)

basis of past recruitments without correcting their biases. From this point of view, the AI technology used is not neutral, because certain methods tend to reinforce the biases in the learning base.

In facial recognition, problems of bias in the results provided by AI algorithms can lead to ethnic or gender discrimination.

The reproduction, or even **amplification by reinforcement**, of bias not detected upstream in the learning databases makes AI a lever for discrimination, especially since these so-called cognitive biases²⁰ are difficult to detect in advance: this is algorithms' Achilles heel.

What can be done to combat bias?

Facilitating audits of AI systems is one of the approaches recommended by the Villani report.

However, it would be pointless to try to find a purely technical solution to a problem that remains primarily political. Access to bank credit is a classic example of gender and origin discrimination. In the USA, even today, access to home loans is still determined by where you live rather than your ability to repay.

The Villani report proposes the "creation of a group of certified public experts who can conduct audits of algorithms and databases and carry out testing using any methods required". The CNIL has changed the authorisation granted to banks for so-called "credit scoring", which assigns a default risk and therefore a differentiated loan rate to customers on the basis of their individual profiles. As a result, credit risk analysts should no longer take into account the gender of the credit applicant, a practice that was previously common, but which ended up discriminating against single mothers applying for credit.

It is becoming urgent to open up the AI "black boxes" in many other sectors: a recent survey conducted jointly by France's National Centre for Scientific Research (CNRS) and SoS Racisme shows that these types of discrimination extend to areas that remain insufficiently explored in France, such as vocational training, car insurance, access to supplementary health insurance, consumer credit, the purchase of a second-hand car, tourist accommodation and company take-overs. The best way to protect against these cognitive biases is to force AI operators to open up their "black boxes" to independent public scrutiny to achieve a sustainable balance between technological development and public protection.

Does AI change jobs?

As an employee director representing the CFDT on the board of INRAE, I take a close interest in this matter in the context of applied research and the development innovations for the agri-food sector.

It has to be said that, over the last decade, AI has become an increasingly important part of process management within the agri-food industry to lower costs, not only by eliminating waste, with applications for food sorting and input management, but also by helping to reduce the workforce, including in distribution. This poses obvious problems of retraining for the least qualified employees, whom our unions must protect and support. The Villani report proposes that a public lab on the transformation of work be set up. Worth a total of EUR 32 billion per year, the leverage of vocational training is also mentioned as a means of developing digital mediation and social innovation so that AI benefits all. Nevertheless, care should be taken to ensure that this is really a means for the individual to be involved in negotiating their own career development. From this perspective, more socio-economic research needs to be undertaken on the reorganisation of AI-affected value chains in the post-COVID-19 context.

²⁰, the term 'cognitive bias' was first introduced by Daniel Kahneman and Amos Tversky to describe trends in human behaviour that appeared to be economically irrational.

Soraya Duboc

- ❖ **Soraya Duboc is an engineer in an international group, former president of the Observatoire des Cadres (OdC), former member of the ethics committee for agricultural research. At the French Economic, Social and Environmental Council (CESE) where she sits under the CFDT, she co-reported the "Data economy and governance" opinion (February 2021).**

What is artificial intelligence used for?

We can consider that artificial intelligence is a tool that multiplies human capacities, that of the individual and that of a community. But isn't this already the case with other applications of science: atomic bomb, electron microscope, genetically modified organism?

What are the specificities of AI-based technologies?

While AI applications in many fields bring undeniable benefits (optimization and automation of manufacturing processes, anticipation of extreme weather events, tailor-made medicine, etc.), they raise serious questions as soon as they are affecting our fundamental rights, our freedoms. The two application examples that come to mind the fastest are recruitment, and court decisions.

Can AI Determine Us?

In these 2 areas taken as an example, AI goes into the field of our behaviors, our emotions, our beliefs and even our intentions: it gleans innumerable and disparate data, ours and those of others, those of our immediate environment, of present and past time, intersect them and claims to anticipate as accurately as possible our reactions, our decisions that we think are free. Even though these expectations are true, the person may not have intended to state them. It can make us predictable by algorithmic computation. It can make us doubt our ability to branch off, our freedom to go off the beaten track. It makes us lose our singularity in a way. And lead to a form of algorithmic determinism.

Is naivety or mistrust appropriate when it comes to AI?

The first bioethical whodunit on artificial intelligence published in 2018 "S.A.R.R.A" features in the near horizon - 2025 - an AI who is entrusted with the care of managing an Ebola epidemic in the heart of Paris. Its author, David Gruson (former general delegate of the Fédération hospitalière de France, and member of the management committee of the health chair of Sciences Po Paris) describes to us as a connoisseur of AI what it can produce by integrating predictability. human motivations and behaviors. Hence, in my opinion, the importance of getting out of a form of naivety, or excessive mistrust of AI. We need to know what the purposes of an AI-based tool are and what its unintended and unwanted social and economic effects are. Collectively, we should be able to define areas of our lives where AI should not be used at all, and areas where it can be used with caution. An analogy can be made with what the biologist Anne McLaren (1927-2007) referred to as "No go areas" and "Slow go areas".

Warda Ichir and Alain Larose

❖ Artificial intelligence: from tomorrow's factory to renewed social and societal dialogue (February 2021)

Warda Ichir, Federal Secretary, General Federation of Metallurgy and Mining (FGMM) CFDT
Alain Larose, Deputy Secretary FGMM-CFDT

How would you define artificial intelligence?

Artificial intelligence (AI) is an advanced technology for general use, that is, which is intended to spread to all economic sectors, with an impact on society as a whole. AI refers to a computing power capable of processing different types of data - speech recognition, facial recognition, video recognition, and "text comprehension" - that relies on developed networks and large quantities of data. The availability of a large mass of data, stored in the cloud, fed by many connected devices such as computers, smartphones, sensors, or robots allow AI to train and gain relevance.

What is the benefit of this technology?

The interest of AI is to offer predictions (text entry, interpretation of medical radios, predictive maintenance), to formulate recommendations (videos on Youtube and Netflix), even to make decisions (sets prices on Amazon) [1].

AI therefore leads to decision-making, depending on what it was programmed for. In fact, while machines and robots replace our physical strength (especially our arms and legs), AI partly replaces the capacities of our brains. But we haven't stopped using our legs since bicycles, cars and transport have been around. Likewise, calculators save us time and ultimately leave our brains available for other things. Be that as it may, remember that people are essential for designing programs, assigning them a purpose, selecting training data, and monitoring results. Even if the principle of AI machine learning leads to some freedom from programming, humans can and should therefore keep control.

The first problem is that individual decision-making is considered to be the domain of man, especially in legal matters. Indeed, the age of majority set at 18 allows full exercise of their rights, but they come with full responsibility. Beyond the fact that article 22 of the GDPR prohibits "being the subject of a decision based solely on automated processing in the European Union" [2], it is easy to understand that any decision must be linked to a human, responsible, to be explained, and possibly repaired. Indeed, AI is the result of human programming, and remember that a tool has no will of its own. The second problem lies beyond the individual decision: at the collective level, the decision refers to the political. Remember that the OECD qualifies AI as pervasive technology, so ready is this technology to cover every aspect of our daily life [3].

What are the issues behind AI?

Digital transformation in general, and AI in particular, therefore certainly refer to economic and social issues, but also political ones because they potentially have an impact on the whole of society.

In general, while the industry has begun its digital transformation, it nevertheless seems that the deployment of AI is only in its infancy, due to the lack of maturity of its industrial applications. However, the movement is well underway and the production activity should be deeply disrupted by AI and other digital technologies (1). Changes in the company will thus result in more or less predictable impacts in terms of employment and working conditions (2). Faced with the magnitude of these challenges, social dialogue, in its institutional form, currently seems ineffective in dealing with issues of AI and digital transformation (3). Finally, beyond economic and social concerns, AI refers to democratic questions, both within the company and outside at the territorial level (4).

What is the level of investments in artificial intelligence?

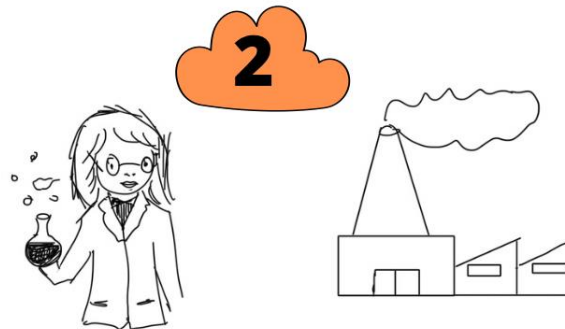
Investments are still limited but inevitable. The industry began its digital transformation over the past 15 years, even though AI has not yet reached its full maturity. Indeed, according to the study by the Fabrique de l'Industrie [4], two thirds of investments by French industry are intangible and one third are material (against 50-50 for Germany, see diagram "Share of intangible assets in industrial investments"). Computer and electrical products, machinery and equipment and transport equipment (automotive and aeronautics) account for 62% of intangible investments in French industry, while they represent a quarter of industry added value.

BARRIERS ON AI

SOURCE: FGMM-CFDT, February 2021



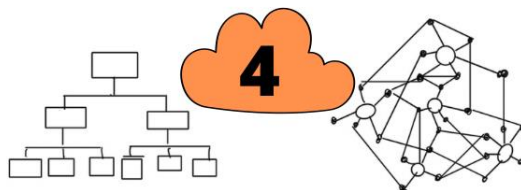
An expensive technology with disappointing results due to lack of data



Missing links between a fragmented research and an industry awaiting concrete applications



Lack of skills



Work organization and culture that is too vertical, contrary to the network structure of AI



Confidence to be established by law and by social and societal dialogue

The investments made relate to software, databases, AI, but are not found in the productive apparatus in the material sense of the term. In addition, this situation is encouraged by public policies, in particular by the research tax credit, intended to support companies' R&D spending, or the "Industry of the Future" plan. "Producing in France" is therefore the collateral victim of this policy [5] and, in a certain way, the dematerialization or servicialization of industry is underway. At the heart of the industry of the future, intelligent factories are populated by sensory organs, connected objects. Equipped with sensors, they are able to measure any physical quantity (sounds, lights, color, speed, weight, effort etc.), to locate (GPS, gyroscope), to recognize (biometric data, cameras), to trace parts, sub-assemblies, products, tools, and to access their characteristics contained in the RFID tags (storage of data retrieved remotely by radio frequency).

Like the human body, the sensory functions of the smart factory collect a mass of big data which is stored, via a digital network, in what is called, big data. A complex data processing addresses commands to the mechanical and motor functions: supply of parts by automatic guided vehicles, adjustment of the workstation according to the morphology of the operator and the type of product to be manufactured, piloting of a robot etc.

The data stored in big data represents a sum of knowledge mobilized by artificial intelligence. The smart factory is thus endowed with a capacity for self-learning and for solving complex problems that until then only man was capable.

These production units have the power to communicate through digital networks: with each other at company boundaries; between contractors and subcontractors for the company extended to the sector. The manufacture of a product is then the result of an industrial process that dialogues and is deployed within a connected value chain. It communicates with the outside world through the internet giving the customer the possibility of placing a personalized order which will be translated into a production order. The industry of the future also aims to increase the capacities of the human being. This is the case with augmented reality, which makes it possible to operate in a digitized virtual space where the operations carried out physically act on a real and remote environment; the exoskeleton, a biomechanical appendix installed on the human body to assist it in its physical tasks; or the cobot, a robot that collaborates and interacts with humans. The industry of the future is therefore a profound transformation whose objective is to increase economic performance. The stake for trade unionism is to make progress for humanity.

What Kinds of Benefits Does AI Offer Most Businesses?

Immediate but still limited benefits. It must be recognized that while AI makes a lot of noise, significant deployment examples remain relatively confidential today. Regarding industry, priority would be given to technologies likely to bring immediate benefit (cost reduction, for example). Companies expect AI to accelerate the automation of certain processes, which have also been made more agile, and also aim at customer satisfaction. However, since AI is not yet fully mature, the costs associated with its deployment may seem exorbitant with regard to the immediate results obtained (see diagram "The brakes on AI"). Naturally, the degree of diffusion of AI depends a lot on the concrete applications imagined for a sector, depending on the bridges between the worlds of research and industry which are not sufficiently developed and must be amplified, despite initiatives such as competitiveness clusters and collaborative platforms such as LAMIPS [6]). For the moment, the main uses of AI according to IDC [7] concern automated customer services (chatbots), defense and national security (facial recognition), assistance with medical diagnoses and personalized medicine, freight / logistics management, , automated query processing, advanced simulation, remote asset and fleet management (route optimization, remote vehicle diagnostics, driver monitoring), personalized purchase recommendations, automated content solutions (digital twin), and smart grids.

And on the data side, what's going on?

AI requires a certain amount and quality of data in order to train and provide reliable recommendations. One of the main obstacles is the low availability of shared data. Companies are afraid to share their data, which prevents the implementation of AI in value chains, especially since interface problems and different standards do not contribute to cooperation. The interest of Big Data lies in being able to take advantage of new data produced by all stakeholders - companies, individuals, scientists and public institutions - in order to optimize its commercial offer, its services, and develop research and development. The network effect is therefore not very visible until this critical size is reached and most algorithms suffer from a cold start before acquiring the right data. But once launched, digital can help generate value and quickly overtake traditional businesses. This upstream work on data requires time and also addresses organizational and cultural issues in companies. On a technical level, the development of 5G and connected objects will favor the development of AI in France, if only in relation to the additional data flows provided.

How do we look at AI?

In addition, one of the most important obstacles to the adoption of AI by companies, noted by the European Commission, relates to the lack of confidence around AI [8]. In this regard, the proportion of companies that identified AI as a potential risk as part of their annual report to shareholders more than doubled in 2018, which represents 55 large companies, according to the Wall Street Journal. [9] (damaged brand reputation, declining confidence, hidden costs, possible complaints, etc.). Lack of confidence stems both from companies and from other actors in society and mainly results from a feeling of lack of control over the risks that may arise.

The risks are of several types. Regarding computer bugs, or even biases blamed on AI, it should be remembered that errors are human! Indeed, if Gérard Berry [10], professor at the Collège de France, says he is convinced that the bug is a component of the computing of complex systems, he nevertheless specifies that the latter is always initially the result of human error. Likewise, algorithms are not inherently racist or sexist, but reproduce the (human) biases observed through the data. The complexity of computer systems makes it difficult to control them.

Safety and security issues are of paramount importance, as the scope of computer intrusions can be severe as the volume of data grows. In any case, investing in data safety and security makes it possible to act on trust around AI, and could even constitute a source of jobs. In relation to the governance of personal data must be lifted by more transparency and clear ethics. The collection and use of personal data must be made explicit and accepted by all economic and social actors. The lack of AI skills within companies is also a brake insofar as companies do not master the deployment of AI and use external service providers. Currently, the number of AI experts is reportedly insufficient to meet demand. Cédric Villani [11] affirmed that French research was at the forefront of the world in mathematics and artificial intelligence, on the other hand, the transformation of scientific advances into economic industrial applications is more delicate and France suffers from the brain drain... Let us recall that one of the most important figures of artificial intelligence in France works for Facebook: it is Yann LECUN.

But adopting AI is all about time ... and data, isn't it?

Yes. According to IDC [12], more than a quarter of European companies have adopted AI and half plan to do so soon. Understandably, the Covid-19 health crisis has slowed down plans for AI adoption instead, given the uncertainties and lack of cash. Nevertheless, investments in AI are expected to resume growth after the health crisis in order to accelerate automation and digital transformation. AI may even be a way to intelligently bounce back from the crisis engendered by lockdowns and quarantines. Like any new technology, AI must be domesticated by the socio-economic system to reach its full potential. Recall that at the end of the 1990s, information and communication technologies had a slow but profound economic impact, with no apparent improvement in the microeconomic performance of companies [13]. AI is thus one of the great and complex changes because they are fundamental in nature and permeate all sectors of society.

Beyond entry taken into account, and technical considerations, it is also necessary to take into account the changes in practices in both economic and social life. This is what Pascal Griset sums up as follows: "Whatever the eras, new techniques result from a dialectic between another technique, the work of researchers, engineers, entrepreneurs, and social demand, 'aspiration of political leaders, the demands of citizens, the desires of consumers, the demands of workers, financial criteria or even the dream of visionaries, even of utopians "[14].

Don't you think that economic value is increasingly relying on the network with platforms and the reorganization of value chains?

Yes. For Nicolas Colin and Henri Verdier [15] the value now resides in the multitude that we all form, educated, equipped and connected individuals. Indeed, the billions of people connected around the world and their exchanges represent a tremendous source of wealth for those who know how to capture and exploit it. This is the recipe for success for web giants. The value of digital companies is created by users and their data, the fuel of AI.

Just look at the most successful example of platforms with the GAFAMs, with their rapid breakthrough and diversification spanning the economy as a whole. They are often criticized for abusing the value produced by others, but the sharing economy, or the collaborative economy, also falls within the scope of "platforms". By relying on the effects of networks, considerably amplified by the Internet, each web giant has, in a way, been able to impose a standard on the world population, whether through a search engine, software, a smartphone. , a social network, ...

As a result, competitive advantage now depends on the ability to create and control networks: companies that manage to connect activities, aggregate the data that flows between them, and extract value from it using analytics. and AI will be the winners of the digital transformation.

In addition, the effects of platformization are regularly qualified as disruptive due to the reorganization of value chains, more towards service. In 2015, Michael Porter and James Heppelmann [16] dissected the very profound transformation process that characterizes the transition from a classic economy to a digital economy. Initially, a simple product, to which an electronic chip is added to make it intelligent, then connected to a user or a manufacturer, ultimately becomes just one element of a much larger system (See diagram "Systems of systems"). It is the system that connects the products - not the products themselves - that is the main advantage. The model of these platforms leads to reconsidering the place of the material product, that is to say the original product in the value chain, therefore that of the factory and the jobs behind it.

What are the consequences of AI on employment?

The Chinese group Ant, 5 years after its creation, competes with the world's leading financial services group JPMorganChase, with 10 times more customers than American banks, but 10 times fewer employees to carry out traditional operations: "the value obtained n 'is not generated by business processes executed by workers, managers, engineers and customer services but by algorithms "[17]. It seems clear that one of the consequences of AI is the automation of an increasing number of human-made tasks and operations. Generally speaking, no one knows exactly how many jobs will be destroyed, or at what rate the combined progress of robotics and artificial intelligence will replace human capacities, at least in part. fact that more than half of current activities could be replaced by AI systems. The promise made by 5G, AI and connected objects for the next few years sometimes even goes as far as the remote management of a factory without workers [18], or at least with as little as possible. Nevertheless, it is likely that new jobs will be created to manage the machines, although we do not yet know the jobs of tomorrow. Indeed, according to a study published in 2017 by Dell and the Institute for the Future, a California think tank, 85% of jobs in 2030 do not yet exist [19]. Finally, note that the job destruction will not only affect workers and will extend to administrative tasks, support functions, etc.

Another significant element, the CDI remains the norm, it is however less and less. In 2018, the Ministry of Labor published a study [20] looking at on the development of permanent and fixed-term contract hires over the past 25 years in France: the proportion of people on permanent contracts (excluding temporary contracts) in the French economy rose from 94% in 1982 to 88% in 2017. In addition, the duration The average fixed-term contract has, for its part, been divided by a little more than two, going from 112 days in 2001 to 46 days in 2017. Even more worrying, nearly a third of fixed-term contracts signed each year in France are less than 'a day ! At the same time, new worker statuses have emerged such as that of self-employed entrepreneurs, for example. In addition, the impact of AI on employment is also qualitative and is expressed through the skills required. The use of the calculator has certainly given us a bit of a disqualification because we are less good at mental arithmetic than our ancestors, but ... so what? Is it that bad? The deployment of AI will lead to a reorganization of the tasks entrusted to machines and humans. Obviously, skills in data extraction and processing, analytics and algorithm development will be required. In terms of soft skills, creativity, interdisciplinarity, critical thinking, the ability to cooperate also tend to become key skills.

What are the consequences of AI on working conditions?

When it comes to working conditions, it should be remembered that the automation of manual tasks has generally reduced physical hardship, but has increased work intensity and cognitive load for employees. For AI, the risk areas remain numerous, knowing that digital technologies have hitherto had the effect of increasing psychosocial risks. If AI can help in the development of certain tasks with its contribution information, the human-machine relationship needs to be built, the degree of prescription made by AI to humans being likely to reduce their autonomy, and generate a form of dehumanization of work. In this regard, Cédric Villani proposes, for example, to consider changing the arduousness account, to take into account new work situations (exclusive obedience to machine instructions, the impossibility of discussing with colleagues without passing through a machine interface, etc.) Discrimination bias, in the context of the recruitment process, must be monitored by organizing data governance in the company, for example within the framework of social dialogue. When setting up AI in a company, a reflection can be initiated on the type of data feeding the AI, the modalities for updating this data, but also on the technical specifications, i.e. In other words, the ethical and other requirements imposed on programming. Similarly, business transformations will impact work organizations, which should be characterized by more flexibility (schedules in particular, permanent availability through digital tools). The search for efficiency, the elimination of downtime can generate stress (no micro-breaks due to optimizations). Teleworking or remote work should also gain ground, due to the remote controls and maintenance made possible. work, which must be rebuilt. This element is particularly a challenge for union teams. Finally, the risks of increased surveillance of employees are already worrying some workers, subject to continuous policing in real time: the risk is that this surveillance will serve as a basis for performance management in the company. Particular attention must be paid to the collection and use of employee personal data, in particular with regard to the protection of privacy.

Is platformization a deconstruction of vertical industrial sectors in favour of the production of goods and services in a network?

Yes. At the heart of the platform, the collection of data and algorithms shape the intelligence of the system to meet the needs and expectations of the consumer but also to take into account, or even anticipate, societal changes. In this vast dematerialized and internationalized network, the productive apparatus becomes a satellite whose agility and plasticity are sought after in order to adapt quickly to demand. The classic large-company structure is no longer suitable because it is too rigid. The evolution of the business model leads to the reconfiguration into a network of inter-operating companies to design and offer the final product as well as the associated service. The actor who captures the strategic data for the business model is also whoever holds the power within the platform, in fact raising a governance problem. Likewise, for the productive subsystem, the major issues are focused on technological and innovation capabilities. At this level, it is these functions which hold the power

and which define the strategic orientations. From this perspective, social dialogue can no longer be the sole responsibility of HRDs and HRDs, but must be nourished by business issues within a complex and constantly changing environment.

What do you think of the level of social dialogue faced with the challenges of AI?

Institutional social dialogue is generally insufficient to face the challenges of digitization. As part of the mandatory consultations and negotiations, a union position on digital issues is possible. Thus, digital and AI can be understood in different ways. First, questions relating to the quantitative evolution of employment (destruction and creation of jobs) and qualitative (transformation of trades and skills) can be addressed in the context of the consultation on the strategic orientations of the committee. group or the CSE, which finds its counterpart in negotiations on the management of employment and career paths.

Likewise, issues relating to disconnection and psychosocial risks can be addressed in the context of the consultation on the social policy of the CSE, and during the negotiation on the quality of life at work (QVT).

Also, a reflection on the impact of digital technology on remuneration can be approached, both from the angle of productivity gains (automation, robotization for example), and of the modification of value chains induced by platformization: these questions will naturally find their place in the consultation relating to the economic situation of the company, and in the negotiation of remuneration and the sharing of added value.

Finally, the CSE consultation on the introduction of new technologies can be the opportunity to trigger an expertise in order to obtain more information. However, despite this existing framework, digitization and AI are not at the heart of social dialogue in companies. The current methods of social dialogue are generally insufficient because the digital transformation and its consequences are imperfectly addressed in the information consultations of the CSE, the Group Committees, and in the context of company or branch negotiations. information constitutes the basis of a diagnosis shared between the social partners, it is not rare to find oneself with absent or incomplete information, which is not able to promote constructive exchanges. The information rarely addresses the consequences of a technological deployment in terms of working conditions, and even less in terms of employment.

And in the best case, social dialogue takes place within the framework of anticipation linked to the consequences of digitization, but the investment decision and the implementation are not discussed. Moreover, considering that the production activity could move towards, on the one hand, hyper-centralized decisions (platforms known today), and on the other hand, by a multitude of interconnected local ecosystems, this means that the contours of the company should evolve, and the same will therefore apply to the place of social dialogue. However, the size of the platforms means that they will be increasingly forced to integrate ethical, societal, and therefore political considerations. The regulation of these new forms of business is not really a given today, except by law. However, the laws are national, while the platforms do not essentially know borders. The border between the economic and the political is blurring: regulatory activity must be relayed internally, within companies and platforms. The issues raised by AI, data, surveillance, security go beyond economics.

The FGMM-CFDT has an original proposal which is to drive business transformations through Social Design, could you explain?

In order to develop the methods and tools of Social Design, the FGMM-CFDT responded to a call for projects issued by the DGEFP [21], a central administration of the Ministry of Labor. Led by Alain Larose, Deputy Secretary General of the FGMM-CFDT, the submitted project is half funded by the European Social Fund. The UIMM [22] and the Alliance Industrie du Futur have agreed to be stakeholders. Ergonomists from the CNAM [23] intervene to create the "Imagine" phase of Social

Design and the simulation of transformations. The Syndex firm is responsible for project engineering, and also works on issues relating to the economy and industrial strategy. Experiments must take place in the company to develop the approach. The origins of the FGMM-CFDT's reflections on industry transformations began following the desire displayed by the Alliance Industrie du Futur [24] to "place human beings at the center of the industry of the future". What did this statement mean in concrete terms? The only answers the employers had: vocational training and forward-looking management of jobs and skills. Clearly adapting the worker to transformations and not conceiving them with him.

If companies continue to drive change on the model taught by management schools and applied by consulting firms, the deployment of the industry of the future will take place in poor conditions. Indeed, several studies (notably the work of Harvard Business School) show that the overwhelming majority of business transformation projects never reach their targets. Worse still, it frequently happens that they degrade the performance as well as the health of workers. It therefore appears necessary to propose another way of carrying out the transformations.

The Social Design method follows another logic. It lays down the prerequisite that any transformation of work mobilizes two dimensions: one strategic and one operational. Company management and trade unions are the legitimate stakeholders in strategic matters; workers and management are directly concerned by operational issues. In other words, the FGMM-CFDT proposes to lead the change by articulating the social dialogue, between the management and the unions, with the professional dialogue which addresses the concrete questions of the content of the work and its organization, between operators and managers. .

Can you specifically describe social design?

For this new method of conducting transformations called Social Design, Alain Larose has identified 5 stages:

1. Understand: on the basis of an inventory and a diagnosis of the economic, social, environmental, industrial and technological situation, the social partners discuss and share the transformation objectives. It is also at this stage that unions and management must take ownership of the Social Design approach, with the help of training they are taking at the same time. This common learning is the means of measuring the degree of maturity of the social actors of the company for the implementation of Social Design. If this is not the case, this route will be abandoned to return to the information and consultation procedures of the labor code.
2. Driving: the framework of the process is set up by negotiating a social design agreement. This involves defining the scope of implementation of the transformation project, formalizing the objectives and methods to measure their level of achievement, the actors who will be concerned and mobilized, the timetable for the deployment of social design, the articulation with the information and consultation of the CSE, and finally the resources devoted to the implementation of the approach.
3. Imagine: the technological offer is now sufficiently diversified and flexible for the digitization of the production tool to be designed taking into account human and organizational factors and the reality of work. This step involves workers and their managers to imagine several transformation scenarios which are then simulated and characterized.
4. Make it happen: the characterization of each of the transformation scenarios allows company management and unions to agree on which one will be implemented. The social partners then develop the necessary support consisting of action plans, training plans and agreements.
5. Evaluate: this stage involves measuring the level of achievement of the objectives of the business transformation project. The evaluation methods designed in the "Drive" step, supplemented by others as necessary during the course of the Social Design process are used to drive the transformation.

Depending on the results obtained, the scenario may be adjusted and the support mechanisms adapted accordingly.

Finally, with Social Design, the FGMM-CFDT aims to develop social dialogue from support to the management of transformations. It also wishes to clearly establish what comes under social dialogue, professional dialogue and the actors concerned while proposing an articulation and an interaction between these two constituents of democracy in the company. This is the way to bring the company's project into discussion and to ensure that human, social and environmental considerations are also taken into account. Objectives that are genuinely shared and understood by the working community concerned must promote the mobilization necessary for the success of the transformation.

Is AI a matter of democracy inside and outside the company, after all?

Yes. The activity of the company and its transformations have consequences which go beyond economic questions, concerning society more broadly. The strategic decisions of those who hold them thus take on a political dimension. As such, they must be part of a democratic process in which all stakeholders, internal and external, must participate.

In the company, what are the questions to ask?

What is the business for, or rather, who should it be for? The purpose of companies must be questioned. The Covid health crisis sadly highlighted in 2020 the limits of French deindustrialisation and our dependence on imports, including on strategic productions. Indeed, the logic of advanced optimization has led companies, with more financial than industrial motivations, to seek the lowest supply costs, without worrying about the risks of supply disruption, sovereignty, etc.

The industry of tomorrow could be the opportunity, with its sensors, robots, 3D manufacturing, to concretely use AI to meet the real needs of citizens such as the (re) location of certain factories, the reduction of our footprint. carbon, the reconquest of certain territories, and support for employment [25]. The issue of AI relates to the purposes assigned to it and therefore to the priorities of the company, which must act for the common good, and not in the sole interest of shareholders. AI and digital technologies are therefore a set of means for which it is necessary to define a purpose which is socially acceptable to all.

This question arises especially since AI requires data for which the ownership issues are not always very clear. If a business uses common good data to serve private interests, or general surveillance, social acceptability is likely to be eroded sooner or later.

Admittedly, the Pacte Law allows progress since the purpose of companies is no longer limited to the sole benefit of shareholders, but the stakes are such that it is unfortunately insufficient. Indeed, given the importance assumed by large platforms in particular, one of the models for the organization of economic life today and tomorrow, it is urgent to restore more democracy to the company. Beyond economic considerations, this question refers to social and environmental issues: it is therefore an eminently political subject [26].

In French companies, workers have the possibility of electing their representatives and of choosing the trade unions which will have the power to negotiate agreements, a choice resulting from the representativeness which is calculated in the first round of professional elections. The democratic system of the company is therefore of a representative type. However, if workers elect their representatives, they have the sole ability to be informed and consulted on the company's choices but do not have the ability to question them. In effect, corporate governance is carried out by only one of its stakeholders: management. It is she who decides on the strategic choices, and the options that will have an impact on the entire working community (work, organization, working conditions, employment, etc.). Negotiations between the company's social partners are then mobilized to support

these projects. At this stage, the FGMM considers that the democratic system of the company is incomplete.

Isabelle Ferreras [27] proposes to democratize the economic field, by advocating a "bicameralism" which would allow workers - who invest not in capital but in work - to have a voice equal to that of shareholders in the governance of large companies. Equipped with as many skills as the board of directors, the CSE would allow employees to position themselves collectively, by majority, on the strategic choices of the company, with a collective right of veto on all issues dealt with by the board. administration, including the appointment of the CEO or the distribution of profits generated by the activity.

If capitalism is a system of government which allocates political rights according to the possession of capital, democracy on the contrary is founded on the recognition of the equality of each and everyone in dignity and rights. The extractive logic of the capitalist mode of government, denounced by Isabelle Ferreras dominates the employees and exhausts the planet, putting the States in competition with each other.

Along with Isabelle Ferreras 'proposal to give equal weight to sala in relation to the shareholders, it is also advisable to imagine a body within which the interested external stakeholders, such as the local community, or NGOs, would be represented, with a view to receiving information from the company (such as the CSE today). It is not abnormal to consider that a company established in a territory is accountable to its elected officials on its activity, its environmental impact, etc.

In local ecosystems, is AI the source of socio-environmental questions?

Digital certainly escapes democratic decision-making because of the power of the actors who steer it, in particular the GAFAMs, but it also offers ordinary citizens the possibility of taking charge, in the name of a solidarity project, for example. There are also several examples of virtuous use of AI, which go in the direction of the common good (fight against hunger, waste management, improvement of the health system in remote areas, etc.).

Jérémy Rifkin, American economist and political advisor, was already celebrating the transition from a logic of ownership to an economy of sharing between users, a new paradigm, which he believes will eclipse capitalism and its values [28]. The economist shows that the sharing economy is developing and blurring the line between producer and consumer [29]. Jeremy RIFKIN is particularly enthusiastic about 3D printers, the generalization of which will allow everyone to produce their everyday objects such as their car or their house. This intelligent collective production would, moreover, be managed by "collaborative commons", kinds of associations or cooperatives formed for the collective interest.

In addition, for Jeremy Rifkin the energy sector would be the first concerned. Renewable energies will develop - as is already the case in Germany, where nearly a quarter of electricity production is renewable in 2015 - and their production and consumption will be managed and optimized by an Internet of energy to become abundant and almost free. Of course, Jeremy RIFKIN's predictions are not shared by everyone, far from it, but they still deserve our full attention.

Digital transformation could thus "naturally" favor the emergence of a plurality of local ecosystems that are self-sufficient in terms of energy and agriculture (vertical farms [30]) for example. These established ecosystems could operate in a circular economy, in order to meet the basic needs of their territory, while reducing their environmental impact. They could also take charge of productions now provided by traditional companies via 3D printers, shared across a more or less extensive territory.

In addition, citizens could politically manage their ethical, social and environmental priorities more directly, by means of direct and representative democracy according to the themes [31]. At the scale of any territory whatsoever, environmental issues would gain in importance because no one wants a

5G antenna near their home for example, or any nearby pollution, while for large companies this relationship with the environment is less direct. Be that as it may, the environmental balance sheet of the digital transformation is difficult to assess between the promises of optimization on the one hand, and on the other the explosion in energy consumption denounced in particular by the Shift Project and the depletion of rare metals [32].

Should we regulate AI?

In terms of global digital regulation, Anne-Thida Norodom observes that the control of public order is shared between States, of course, but also digital platforms [33]. In this, the digital transformation also challenges state authorities and shakes up our democracy. Indeed, on the one hand, the platforms encroach on certain state prerogatives, but on the other hand, they manage to resolve collective problems thanks in particular to AI that the current authorities themselves are not capable of. to manage and constitute, from this point of view, a precious resource.

Nevertheless, states quickly came up against the global, decentralized and open nature of the Internet, which does not adapt well to national regulations. On the monetary level, remember that bitcoins bypass state authorities. However, the "power to coin money" refers to one of the basic prerogatives of any State, as does that of taxation. On this last point, Airbnb collects tax on behalf of several French municipalities and outside of France. France. Beyond currency and taxation, blockchain technology, in that it allows third parties to avoid confidence, defies state organizations.

The high-level group of the European Union on AI defined 7 key requirements in 2018, calling for the organization of governance including multiple stakeholders, guaranteeing respect for these principles: good for people, human supervision, robustness , safety, societal well-being, environment, and accountability. At the European level, Aida Ponce del Castillo [34] observes a proliferation of codes of conduct and guidelines on the ethics of AI (more than 84 documents counted). Based on voluntary service, nothing guarantees their adoption and compliance by companies, as these texts generally do not provide for any sanction in the event of violation. These steps are therefore more "Ethics washing". Finally, European law would benefit from being updated in order to guarantee that human rights are respected by AI systems (discrimination and inequalities), by putting example of independent national controls.

In conclusion, despite the observed brakes, AI will prevail in the economy and society. If companies can temporarily win by replacing work with even intangible capital, however, at the collective level, there is a risk of problems of solvent demand, but also of financing of social protection, unemployment coverage, pensions. etc. Finally, when it comes to prospects, the society of tomorrow could have two faces: one attractive, displaying the radiant features of a return to a local and united economy and the other, grimacing, which would be the reflection of the wildest exploitation and social regression. Environmental considerations could be added to this table: economic predation and the exhaustion of the planet could be erased in favor of collaborative consumption through bartering, carpooling, crowdfunding such as loans between individuals, etc.

The digitization of the economy is a profound and structuring evolution of society. AI is a cornerstone of this. Will it be the source of progress for humanity and the planet or the last avatar of financial capitalism? Only democratic debate in society and in business will make it possible to find the way of the common good and interest.

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David Giblas and Stéphane Barde

- ❖ **David Giblas is an engineer and statistician. He is Deputy Managing Director for Insurance Operations, Customer Relations, Innovation and Health Partnerships at Malakoff Humanis. Malakoff Humanis is a mutualist group governed on equal base by social partners unions and is one of the French leaders in social protection. Stéphane Barde is an engineer and mathematician. He is Data & Digital Director in the group. 4 years ago, both created a Data department within Malakoff Humanis. This department looks at all governance and data visualization work. It also manages Big Data and artificial intelligence.**

Why a Data department within Malakoff Humanis?

David Giblas: The use of artificial intelligence is revolutionizing all sectors of the economy, and Malakoff Humanis is no exception. Our general management understood very early on the usefulness of investing in this disruptive technology and putting it at the center of its transformation in a Data direction. AI acts as a performance lever by optimizing certain treatments, but also as a means of improving customer satisfaction. Thanks to the training of our teams in actuarial science, mathematics and engineering, we were aware that this Data department could help the Group to transform. An artificial intelligence project is indeed above all a process transformation project, but within a framework of trust.

What are the pillars of this transformation project?

David Giblas: We have identified 30 cases of use of artificial intelligence data, before the progressive diffusion of algorithms within Malakoff Humanis. Four years ago, as part of our Data transformation project, we decided to lay the foundations for a major pillar concerning data governance, in line with the protective framework of the GDPR.

We have integrated the concepts of "Privacy by Design" (security integrated into the design) in our projects by limiting the purposes of use and personal data, as well as an ethics analysis system within a framework of European work. Today we have internal governance at Malakoff Humanis in charge of algorithm analysis, which is particularly attentive to subjects such as ethics, the role of humans and the protection of privacy.

Do you have a certification process for algorithms or choices such as ethics by design?

Stéphane Barde: The idea of ethics by design consists of integrating human values and principles from the design of technological tools. This results in an ethical reflection, which then takes concrete shape technically. But at Malakoff Humanis, we have chosen a process for choosing algorithms from a pool of use cases, upstream of a production monitoring process. Our Data Protection Officer meets every month with our professionals in matters of personal data protection, information security, risk management, processing purposes ... It is essential to involve employees when putting AI in the process. This is one of the success factors of any transformation project.

In which cases do you use artificial intelligence within Malakoff-Humanis?

Stéphane Barde: Transforming business processes requires a lot of energy! Our goal is to facilitate the work of employees by providing them with decision-making elements or by automating repetitive tasks. For example, when Malakoff Humanis receives invoices from its suppliers, checking whether the order form is present in each invoice is a tedious operation. For AI, this can be very quick. In addition, it would reduce processing times and reduce the risk of errors. Another example, Malakoff Humanis receives documents from policyholders such as requests for reimbursement, and for some of the algorithms extract the data. Without AI, we would have to manually copy the information for each of these requests. Finally, third example, to fight against fraud, AI is very efficient, the algorithm pre-selects contentious cases, which are then investigated by employees whose expertise is then invaluable.

How do employees understand these new tools?

David Giblas: Employees are all the more involved in a transformation project than they are associated with it. At the start of the project, there are always questions about the functioning and contribution of AI, then once these steps have been taken, the interest in these approaches is quickly validated. The algorithm never makes a decision for humans. When we design an algorithm, the first versions of it are very perfectible. We support it with the know-how of our employees: their decisions are informed by AI, and they are the ones who improve the AI to ultimately be more efficient and focus on tasks with greater added value. Employees are extremely interested and satisfied with this new form of work. Their return is unanimous.

Do you now believe that AI can replace humans in your industry?

Stéphane Barde: No. There is a representation of AI that sometimes goes beyond reality. In general, AI is still far from reproducing sophisticated reasoning, rather rudimentary tasks. es which nevertheless make it possible to guarantee a quality service. Let's not forget that artificial intelligence requires a lot of data to be effective. We use highly targeted artificial intelligence to do simple things, micro-tasks, quite basic compared to human intelligence. What is important is having the skills to master this technology.

Does AI free up employees' time?

David Giblas: Yes, AI has freed up time for the most tedious tasks. Thanks to the time freed up, employees can thus reinvest in a more qualitative relationship with suppliers, to devote more time to value-added tasks, for example. It should be understood that by freeing him from tedious tasks that can be handled by AI, the employee sees the interest of his work increase.

Have there been any discussions about freed up time or intensification of work?

David Giblas: Every job involves tedious tasks. Identifying these tasks assumes technical competence. In purchasing, for example, it is relevant to discuss with buyers to identify these tasks. The objective is to optimize the working time associated with these tedious activities in order to redirect it towards more qualitative work.

What investment do you plan for AI?

David Giblas: A significant investment. Developing an algorithm takes two months, transforming the associated process ... a year and a half to two years. Collecting data and designing an algorithm is 30% of the time, budget, energy of transformation. The 70% of the remaining time is linked to the transformation of the profession.

When you get involved in projects like that, it's expensive. The algorithm challenges preconceived ideas. In the beginning, this requires understanding the business's need to collect the data necessary to create the algorithm. A phase of running in and adapting the algorithm follows, the conclusions of which may not be validated by employees. When the collaborators do not validate the predictions or the selections of the algorithms, we must dissect the reasons. You need to have a good level of skills to confirm the result of the algorithm, because gradually you come across more and more complex cases.

When we put an algorithm in a profession, we must continue to take care of it and this requires a senior level of expertise in the trades on these projects. We need to identify the internal skills to follow it. However, these do not always have the necessary time. In this case, we need to identify the topics on which they need to focus. The algorithm allows them to learn about their craft, because it comes out of cases, which were previously impossible to see. It is a continuous improvement loop.

And from the point of view of the professions?

Stéphane Barde: New activities are appearing in the professions and others are developing; this is made possible by the time saved by the automatic processing of simple tasks by AI. AI is involved in 1% of an employee's range of activities. We cannot say that there is a massive replacement of activities.

The impact of AI on employment is very difficult to measure. Within the Group, AI does not generate job cuts. On the contrary, AI creates new professions. There are people sensitized to data quality, people who have skills in enriching and maintaining data assets. The people who produce the data are the people who process it, and their skills are as important as they are valuable.

Can there be biases in your algorithms? Some insurance companies can, thanks to algorithms, choose clients who have the least risk ...

David Giblas: We are a non-profit welfare group, we do not do medical screening.

Is there a risk of bias?

Stéphane Barde: From a general point of view, there can be biases in the historical data, so the algorithm can be an amplifier. We are fortunate not to have any use cases that would expose us to this type of problem, yet. We systematically analyze the data, to see potential biases: for example, overrepresentations, by age or sex ... We always compare what the algorithm does to a control sample, which is used as a safeguard. In addition, we reason on anonymized data, that is to say without personal data, to limit the possibilities of bias.

What are the explainability and interpretability of your algorithms?

Stéphane Barde: There is a myth of the algorithm that decides on its own. An algorithm does not make a decision, what is interesting is understanding its "recommendation". We often do the composition of several algorithms, which means that we take an average between them. Explainability is not always so easy. We use machine learning, very little "deep learning", a family of less "explainable" algorithms. We therefore make a technical choice that allows better explainability.

In our augmented processes with AI, it's humans who make the decisions. There are no automatic decisions made by our algorithms. We make sure that employees challenge the algorithms over time, particularly in our monthly steering committees. By drawing on the expertise of employees, AI is more of an opportunity than a threat.

Postface

Laurent Berger
Guide to artificial intelligence

The introduction of a technology like that of artificial intelligence, enabled by rapid and unprecedented digital evolution, has profound impacts on citizens and workers and requires governance that must involve all actors of civil society. For the CFDT these changes should not leave anyone on the side of the road.

The CFDT measures the opportunities that this technology offers, without underestimating the risks.

Opportunities in many areas: medical, transport or agriculture, which can help save lives, reduce greenhouse gas emissions, optimize the consumption of resources, create new jobs, to name a few.

In the organization of work, the rise of teleworking during the health crisis offers opportunities for flexibility to which many workers are now attached.

Risks nonetheless, such as the destruction and rapid change of jobs, the loss of professional know-how, the precariousness of jobs and the loss of social protections, inequalities ... These changes require new skills and qualifications, anticipation, support and training. The impacts on working conditions, the intensification of work, the man / machine relationship, must be discussed and regulated.

This technology poses unprecedented societal and ethical challenges: the protection of privacy and that of human dignity, the place of humans in decision-making in the face of the machine, the issue of discrimination. It also poses challenges for our democracies.

In the workplace, we have tools in Europe and France, as this guide points out, and must use them. French and European laws provide that the introduction of new technologies must give rise to information-consultation of workers' representatives.

Social, professional and societal dialogue must make it possible to question the purpose and functioning of artificial intelligence systems, to choose those which are good for humans and for our societies and to avoid, or even ban, those which are harmful.

As this book recommends, humans must remain in control of the decision. Do we want to give a machine the possibility of deciding on the recruitment of a worker or his professional development or the granting of a loan to a citizen, on the basis of opaque algorithms? I think the human should keep the hand. In companies and administrations, HRDs must be able to oppose a decision of algorithms and have the last word on it. Executives and managers must be involved and trained on AI, just like trade unionists and workers.

I welcome this book, which contributes to raising awareness, highlights the issues at work and offers valuable tools and testimonies to question this technology and pose trade unions and individuals as actors in these evolutions and the orientations that are taking place.

Unions in the United States are being created in "tech" companies on ethical issues and on the purpose of the company which displays values for which they have chosen it and which it no longer respects. In France and in Europe, unions as well as other actors of civil society will be expected on these challenges and respond to these issues.



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